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# Education for Work

By THOMAS L. NORTON

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THE REGENTS' INQUIRY

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THE REGENTS' INQUIRY INTO THE CHARACTER AND COST  
OF PUBLIC EDUCATION IN THE STATE OF NEW YORK

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## FOREWORD

THE Inquiry into the Character and Cost of Public Education in the State of New York was undertaken in order to find out what the educational system of the State is accomplishing, how well its total program fits present-day needs, and what the costs of that program are and should be, and to assist the Regents in considering the present needs and problems of the school system, and in reformulating the fundamental educational policies of the State. Under the provisions of the state Constitution, this responsibility falls primarily upon the Regents.

The Inquiry was organized late in 1935, under the direction of a Special Committee of the Board of Regents, consisting of John Lord O'Brian, William J. Wallin, and Owen D. Young, Chairman. Thomas J. Mangan, the present Chancellor, and James Byrne, the former Chancellor, have sat with the Committee as ex-officio members from its inception.

The work of the Inquiry has been divided into three major undertakings: first, the examination of the educational enterprise of the State and the analysis of its outcomes, methods, and costs; second, the critical appraisal of the work now under way; and third, the formulation of policies and programs for dealing with the immediate problems and issues, and long-range objectives of the educational system of the State. The purpose of the Inquiry has not been to gather great masses of statistics, to devise numerous questionnaires, or to present meticulous factual descriptions of every phase of education within the State. Rather, the Regents' Committee and the staff of the Inquiry have been interested in isolating major issues and in hammering away at the problems which presented themselves in order to find a reasonable comprehensive

solution which would commend itself to the forward-minded people of the State of New York.

In conformity with this resolution, the Inquiry is publishing a limited part of the materials which have been brought together—such studies as bear directly upon central issues and major problems emerging in public education. Among these is the study, *Education for Work*, by Dr. Thomas L. Norton, Associate Professor of Economics, University of Buffalo, a member of the Inquiry staff engaged in studies of secondary education under the general direction of Dr. Francis T. Spaulding. Associated with Dr. Norton in studies of various types of vocational education were: Miss Alice L. Edwards, member of the President's Advisory Committee on Education; Dr. Walter B. Jones, Chief, Division of Industrial Education, Pennsylvania Department of Public Instruction; Professor Z. M. Smith, of Purdue University; and Dr. Harold G. Shields, Associate Professor of Education, University of Chicago. In the course of his studies, Dr. Norton was fortunate in having the assistance of various other members of the Inquiry staff and the valuable cooperation of many teachers, principals, supervisors, and state and local educational officials.

The views expressed in this volume are those of the author; the Regents do not assume responsibility for them. The Regents wish to express their deep appreciation, however, to Dr. Thomas L. Norton and his associates for the important contribution made to education and to the Inquiry through this study.

LUTHER GULICK

## P R E F A C E

EACH year, approximately 150,000 to 200,000 pupils in secondary schools in New York State terminate their formal education. Nearly all of these secondary school pupils face eventually the problem of earning a living. Under our economic system, individuals are required to produce goods and services in exchange for the means of supporting themselves. "One's job," to quote the Lynds, "is the watershed down which the rest of one's life tends to flow."<sup>1</sup> Today, many of these young people in New York State are finding it extremely difficult to procure employment. In New York City in 1935 the Welfare Council found that one-third of the young people investigated were unemployed youth, sixteen to twenty-four years of age, out of school, able to work, desirous of employment but unable to obtain it.<sup>2</sup> Similar situations are found in other communities.

In an attempt to face this problem of earning a living, youth is confronted by the task of adjusting itself as best it can to the economic system, and, in this adjustment process, must by one means or another secure the training that will assist it in meeting the situation. At times it may even be confronted by an economic condition that does not provide opportunities for employment. Because of this situation, the difficulties which youth faces cannot be attributed entirely either to education or to lack of education; the economic system must bear its share of the responsibility. On the other hand, the school cannot place the entire blame on our economic struc-

<sup>1</sup> Robert S. and Helen M. Lynd, *Middletown in Transition*, p. 7. New York: Harcourt, Brace and Company, 1937.

<sup>2</sup> E. N. Matthews, "Unemployed Youth of New York City." *Monthly Labor Review*, Vol. 44, p. 267, February, 1937.

ture, for preparation to meet the task of earning a living is an important phase of successful adjustment.

The present study attempts to define the needs for vocational adjustment under modern economic and social conditions in New York State, and to appraise the facilities provided by the public schools for meeting these needs. Although the report does not assume that vocational adjustment is the only problem with which the schools should be concerned, it does maintain that it is an important one. The results of the inquiry are presented here, divided into two parts, in an effort to answer these questions: What *are* the secondary schools doing in regard to the problem of vocational adjustment? What *should* they do? Part I presents the results of investigation; Part II, recommendations.

Part I may conveniently be divided into three sections. Chapter I discusses in a general way various factors in our modern economy which have a bearing on the problem of vocational adjustment. Among the factors mentioned briefly are population movements in New York State, changing social and economic wants, technological developments, skill requirements of industry, occupational and geographic shifts within the State, and the mobility of labor. No attempt is made to present any exhaustive discussion of these. Such an undertaking would be beyond the scope of this report. Nevertheless, schools must consider such factors when determining an appropriate educational program.

Chapter II will summarize the extent to which pupils leaving secondary school are succeeding in adjusting themselves to economic life. Specifically, we endeavor to find out what has happened to these pupils since leaving school, and how successful they have been in meeting the problem of vocational adjustment. Since these topics are the subject of a special Inquiry report, they will only be summarized here.<sup>3</sup>

<sup>3</sup> Ruth E. Eckert and T. O. Marshall, *When Youth Leave School*, Regents' Inquiry, 1938.

The last four chapters of Part I analyze those courses in the secondary schools of the State which contribute toward a solution of the problem of vocational adjustment. Attention has been devoted primarily to courses which have, directly or indirectly, a vocational implication, namely, vocational industrial, vocational technical, vocational agricultural, and commercial education, as well as home economics and homemaking.<sup>4</sup>

On the basis of the evidence concerning economic and social factors involved in the problem of vocational adjustment, the experience of young persons in meeting this problem, and the training offered by the schools, Part II outlines a desirable state policy with respect to education for vocational adjustment. To the fundamental point of view underlying these recommendations, all of the specialists subscribed. In their special reports, they also made certain additional detailed recommendations.

This report was written in the summer and fall of 1937 and discusses the conditions found at that time.

T. L. NORTON

<sup>4</sup> These chapters are based on special materials on file with the Regents' Inquiry. Professor Z. M. Smith of Purdue University, State Supervisor of Agricultural Education for Indiana, is responsible for reporting on vocational agriculture; Miss Alice L. Edwards, member of the President's Advisory Committee on Education, for reporting on home economics and homemaking; Dr. Walter B. Jones, Chief, Division of Industrial Education, Pennsylvania Department of Public Instruction, for reporting on industrial and technical education; Dr. Harold G. Shields, Associate Professor of Business Education, University of Chicago, for reporting on commercial education.



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Part I

Findings of the Study



## CHAPTER I

# Economic and Social Factors Influencing Vocational Adjustment <sup>1</sup>

A MULTIPLICITY of economic and social factors affect the vocational adjustment of young people who leave the public school to go to work. Indirectly, these factors bear on the problem of developing an adequate training program in the public schools. While it would be desirable to analyze fully this complex structure of interrelated forces, obviously it is not possible to do so within the limits of the present volume. However, since this subject has been fully treated in numerous publications based on extensive study and original research, it is only necessary for the purpose at hand to state briefly some of the most significant factors which should be considered in developing an educational program.

### NATURE OF MODERN INDUSTRY

Of the factors which influence modern industry, the increasing use of machinery in the production of goods and services has been outstanding. This change has been accompanied by others, such as the division of labor, mass production, increased capital investment, and greater concentration in the control and ownership of enterprise. Still another factor is continuous alteration. A new chemical process calls into being a new industry. The development of a substitute product reduces and frequently eliminates the production of an old product.

<sup>1</sup> This chapter is based on unpublished material on file with the Regents' Inquiry. The material was gathered by the present author with the assistance of Marian R. Caine.

Skill requirements in many lines of activity are in a constant process of alteration. The character and the amount of employment is affected by all of these factors.

Wage earners and salaried employees have come to constitute the overwhelming majority of gainful workers.<sup>2</sup> With vast numbers of workers dependent on money income as the basic essential to living, uninterrupted employment becomes their major concern. Because of the inability of the majority of these workers to save, an inability resulting not from an unwillingness, but rather from the lack of sufficient incomes,<sup>3</sup> also of vital importance, should the job be lost, is reemployment without a loss of time.

Unemployment is a constant hazard faced by the workers. It arises not only from depressions, when it is most severe, but also from the introduction of new machinery, seasonal fluctuations in business activity, changes in consumptive demands, the movement or migration of a plant or an industry, and the like. Each such change places upon the worker the burden of readjustment to a new plant or a new job.

From this very brief survey of the nature of modern industry, four things stand out in relation to the problem of vocational adjustment. First, the worker must have information about industrial needs and conditions if he is to become adjusted and, when necessary, readjusted to economic life. Second, he should be trained in those fields of work which provide the best permanent employment possibilities. Third, his training should be of a character that will enable him to adapt himself to the changing situation. Fourth, he must have available, after he has been employed, the opportunity of learning a new

<sup>2</sup> W. S. Woytinsky, *The Labor Supply in the United States*, p. 5. Occupational Statistics of the 1930 Census Tabulated by Class of Work and Industry, as well as by Sex, Race, and Age Groups, prepared for the Committee on Social Security, Social Science Research Council, 1936.

<sup>3</sup> M. Leven, H. G. Moulton, and C. Warburton, *America's Capacity to Consume*. Institute of Economics, Brookings Institution, Publication No. 56, 1934. *Passim*.

## *Factors Influencing Vocational Adjustment*

type of work if he is to become vocationally readjusted as a consequence of alterations in occupational opportunities.

### POPULATION TRENDS AND VOCATIONAL ADJUSTMENT

Students of population trends have noted that our population is undergoing a series of basic changes. For one thing, there is a slowing down in the rate of increase of the population. This is due to a reduction in the size of the immigrant class, and to a decline in the excess of the birth rate over the death rate. Children form a decreasing proportion of the total population<sup>4</sup> and, as a consequence, the population is getting older. Concurrent with the decline in the relative proportion of young people in the total population there has been a decrease in the percentage of such persons who are gainfully employed. Technological developments, compulsory education laws, more rigid enforcement of attendance laws, rising standards of living, employer hiring policies, and State and federal labor legislation have contributed to this situation.<sup>5</sup>

Another change in the population, with special reference to New York State, is the continuance of urbanization with a proportionate decline in the rural population. Urban population increased 22.5 per cent from 1920 to 1930, while during the same period, the rural population declined 9.8 per cent. Along with these changes there has been another, namely, the speeding up of the process of suburbanization, which is perhaps the most distinct trend in New York's population movement during the 1920's. The increase from 1920 to 1930 in the rural non-farm population has been estimated at 34.3 per

<sup>4</sup> Since 1880, the number of children under five years of age in New York State has been a decreasing proportion of the total population. Of even more significance, the actual number declined from 1920 to 1930. Even the age group, five through nineteen years of age, declined proportionately in the State since 1880.

<sup>5</sup> Cf. Robert S. and Helen M. Lynd, *Middletown in Transition*, p. 49. Harcourt, Brace and Company, New York, 1937, for comment on the situation in Middletown.

cent, and it is in the counties which have the the largest cities that the most rapid increases occurred.<sup>6</sup>

Changing trends in population growth have a bearing on vocational adjustment in that they affect in part the available supply of labor. Furthermore, they will affect in the future the nature of the demand for commodities and services and hence of job opportunities. The declining birth rate points not only to a decreasing school population but also to the expectation that the relative importance of workers below 20 years of age will continue to decline. The increasing age of the population, and hence the probable extension of the working life, coupled with the continuance of technological changes, will make more apparent the need for an adequate retraining program. Urban communities will still be important centers for vocational training but suburban areas are expected to show greater interest in the problem. The rural-urban migration, characteristic of New York State, raises the question of the appropriate type of vocational training for rural youth. Obviously, agricultural education will continue to be an important form of vocational training but emphasis on farm mechanics, farm electricity, farm carpentry and farm plumbing—in addition, of course, to strictly agricultural training—would be of value not only to the boy who remains on the farm, but also to the youth who may later migrate to the city.

#### CHANGING ECONOMIC WANTS

Economic wants are influenced by a number of factors which in turn react upon production and employment. Any alteration in the income pattern will affect the nature of a people's expenditures for different types of commodities.

<sup>6</sup> Cf. W. A. Anderson, *Population Trends in New York State, 1900 to 1930*. Cornell University Agricultural Experiment Station Bulletin 547, December, 1932.

Cf. also P. K. Whelpton, "Trends in Population Increase and Distribution during 1920-1930." *American Journal of Sociology*, Vol. XXXVI, pp. 877-79, May, 1931.

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Changes in the age composition and the geographic location of the population will influence the type of goods demanded. Fashion in consumption alters materially the nature of income expenditures, and hence the quantity and the nature of work. Services of all kinds are assuming an increasing emphasis in the minds of the consuming public. A considerable transfer of home functions to outside agencies has occurred, as is evidenced, for example, by the increase in the number of beauty parlors, restaurants, and commercial laundries. Again, changes in dietary habits have influenced production, especially the decline in the per-capita grain and cereal consumption and the increase in consumption of such foods as milk, dairy products, fruits, and vegetables. Altogether, it is safe to say that the many shifts in consumers' desires inevitably affect the occupational pattern and the skill requirements.

Changes in consumers' wants are one indication of the need for employment adaptability among workers and of the desirability of maintaining a flexible program of vocational training.

### TECHNOLOGICAL DEVELOPMENTS

The presence of technological developments in the modern economy is one of the most familiar facts of our time. The twentieth century, and more particularly the postwar period, has experienced rapid strides in all forms of technological change, which in turn have influenced the amount and the nature of employment opportunities.<sup>7</sup> For example, between 1920 and 1929 the output of manufacturing rose 40 per cent, and the number of man-hours required dropped 2 per cent.<sup>8</sup>

<sup>7</sup> Cf. H. Jerome, *Mechanization in Industry*, National Bureau of Economic Research, Publication No. 27, New York, 1934, for a detailed discussion of mechanization. Cf. also National Resources Committee, *Technological Trends and National Policy*, 75th Congress, 1st Session, House Document, No. 360, 1937.

<sup>8</sup> Cf. D. Weintraub and H. L. Posner, *Unemployment and Increasing Productivity*, p. 35. Works Progress Administration, National Research Project, March, 1937.

Continued technological change means that any training program may be subject to modification, and school administrators, therefore, must keep abreast of current developments. Furthermore, caution should be exercised in attempting to incorporate too much training into a course that is related to an industry which is undergoing rapid alterations. Otherwise, "occupational obsolescence" may be high even for young workers entering that field. It might prove advisable under such circumstances for the student to receive general training in the ability to adjust himself, and to wait until he is employed before acquiring the more advanced skills.

One problem connected with technological developments is the displacement and absorption of labor arising from such movements.<sup>9</sup> Although this factor does not by itself account for the constant ebb and flow of workers into the various industries, it is important. Temporary technological unemployment arises because of the lag between displacement and reabsorption. David Weintraub estimates that during the period 1920-29 for manufacturing "the process of absorption, when not impeded by cyclical recessions, lasted approximately one and one-half years."<sup>10</sup> Studies of the reabsorption of displaced workers, made during the late twenties and the early part of the depression, indicate that the majority of these workers found new employment in fields other than the one in which they were originally occupied. In many instances the new job bore no relationship to the old one. Furthermore, the studies show that considerable time was lost before a new job was found, and that when one was found, it was generally less satisfactory to the worker, paid less, and was secured only after

<sup>9</sup> Cf. C. Goodrich and others, *Migration and Economic Opportunity*, p. 468. University of Pennsylvania Press, Philadelphia, 1936.

<sup>10</sup> D. Weintraub, "The Displacement of Workers through Increases in Efficiency and Their Absorption by Industry, 1920-31." *Journal of the American Statistical Association*, Vol. 27, p. 394, December, 1932.

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he had been employed at intermediate jobs.<sup>11</sup> All this points to a need for a retraining program which will help the worker to speed up the process of readjustment. As with initial training, retraining should be directed toward those occupations which show a need for additional workers. Also the fact that displacement and reabsorption do occur supports the contention of certain writers that training in the future must, for the most part, avoid overspecialization and make it possible for an individual to shift from job to job.<sup>12</sup>

### OCCUPATIONAL DISTRIBUTION AND TRENDS<sup>13</sup>

During the period 1910-30 there has been a definite shift in the importance of occupations in New York State, with a decline in the relative importance of occupations involving the production of goods (for example, agriculture, forestry, fishing, mining, manufacturing, and mechanical industries) and an increase in the relative importance of many of the occupations involving services (for example, trade, transportation, and communication as well as clerical, professional, and public service).

<sup>11</sup> D. Lubin, *The Absorption of the Unemployed by American Industry*, Brookings Institution, Pamphlet Series, Vol. 1, No. 3, 1929.

E. Clague and W. J. Cooper, "The Readjustment of Workers Displaced by Plant Shutdowns," *Quarterly Journal of Economics*, Vol. 45, February, 1931.

R. J. Myers, "Occupational Readjustment of Displaced Skilled Workmen," *Journal of Political Economy*, Vol. 37, August, 1929.

T. W. Rogers, *The Occupational Experience of One Hundred Unemployed Persons in Bloomington, Indiana*, Indiana University, 1931.

<sup>12</sup> B. F. Kimball, *Occupational Trends in New York State*, p. 165. Educational Research Studies 1937, No. 2, New York State Education Department, Albany, 1937.

W. F. Russell, "Making Adjustments in a Changing Society," *Occupations*, Vol. XIII, pp. 486-7, March, 1935.

V. C. Fryklund, "Training and Changing Technology," *Industrial Arts and Vocational Education*, Vol. 22, p. 371, December, 1933.

V. C. Fryklund, *The Selection and Training of Modern Factory Workers*, p. 17, University of Minnesota Employment Stabilization Research Institute, 1934.

<sup>13</sup> B. F. Kimball, *op. cit.*, for a detailed analysis of the occupational census statistics for New York State. Similar studies might well be made for other states.

Again, broadly speaking, for the United States and for New York State, there has been apparent in the past two decades a shift from manual to white-collar and proprietary occupations, with the greater part of this shift taking place among women workers, which reflects what has just been pointed out—that the relative importance of service occupations has been increasing.

When all gainfully employed workers in New York State are classified not upon the basis of occupations but according to a socio-economic classification, certain trends from 1910 to 1930 are evident. For example, in the white-collar group the greatest relative increase was among the clerical workers; the professional group was second; and the nonfarm proprietors were third. In the manual class, the skilled workers increased most rapidly and the unskilled least.<sup>14</sup>

Shifts of employment, whether regarded from the point of view of industries or occupations or socio-economic classes, do not as a rule come suddenly and are expressed ultimately in the alteration of employment distribution. Considered in this light the trends have a vital bearing upon a training and guidance program. Past and current trends cannot serve as determiners of what will happen in the future, but they can serve as indicators, and as such can be used as a partial basis for action.

#### CHANGES IN SKILL REQUIREMENTS

In a very general way, variations in skill requirements follow the variations in the relative importance of agriculture, manufacturing, and other industries. More narrowly, trends in skill requirements are traced through the types of workers required within these broad categories. On the one hand, skill obsolescence follows wherever mechanization replaces human labor, when an old industry is discarded, or when an old process goes by the board; on the other hand, demands for

<sup>14</sup> B. F. Kimball, *op. cit.*, p. 50.

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new skills arise because of these same changes. From the introduction of a new industry an entirely new method or manner of doing things may result. During the period 1910-30 profound changes occurred in the skill requirements, not only among manual workers but also among the white-collar groups. An example of the latter type of change is the situation among stenographers, bookkeepers, and clerks who have been confronted with dictaphones, bookkeeping machines, automatic check writers, slot machines, coin changing machines, and the like. Use of the calculating machine illustrates the work created by the installation of machinery.

The rate of increase in the various skilled groups among all manual workers has already been mentioned. The situation in manufacturing, however, should be considered separately. Some authorities maintain that mechanization is reducing the relative importance of the highly skilled handicrafts as well as the rough manual labor. Their place, they believe, is being taken more and more by the semi-skilled machine operator or tender.<sup>15</sup> The demands for skilled labor follow two divergent trends; one pointing to the continued elimination or decline in relative importance of the old handicraft occupations, while the other indicates the increasing need for certain types of highly skilled labor, such as the junior technician.

In reality, the perfect training program will exist when the skills of the working population exactly match the skills required for existing occupations. The factors altered by each change in method and level of production should be watched as a basis for a retraining as well as for a training program. A retraining program, however, is desirable not merely because of the existence of change, but also because of the impos-

<sup>15</sup> H. Jerome, *Mechanization in Industry*, p. 401. National Bureau of Economic Research, Publication No. 27, New York, 1934.

L. Wolman and G. Peck, "Labor Groups in the Social Structure." *Recent Social Trends*, Vol. II, p. 806.

A. M. Edwards, "Composition of the Nation's Labor Force." *The Annals of the American Academy of Political and Social Science*, Vol. 184, p. 19, March, 1936.

sibility of exact prediction regarding the future. Because of the latter fact it would also seem advisable that the initial training program for many future workers should be in the direction, not of highly specialized training, but of a general training which would permit the pupil to meet his initial adjustment and would aid him in his adaptation to changing conditions.

The minute specialization of the modern factory demands a large number of semiskilled workers, many of whom require training of only a few weeks or months on the job to obtain the necessary manipulative ability. An analysis<sup>16</sup> of the jobs in eighty-five manufacturing plants in Minnesota, representing thirty-three different industries, disclosed the fact that 72 per cent of all the operations in these industries required a training period of less than nine months. Of these operations 22 per cent required less than half a month of training for their satisfactory performance and 33 per cent required from half a month to two months. Obviously, the public school cannot appropriately offer extensive training in these semiskilled occupations. It is far more desirable to give this group a background sufficiently broad to inform them as to the basic operations of industrial production as a whole, with instruction in such related topics as labor economics, accident prevention, and the use of public employment agencies, together with civics, English and other cultural subjects, as well as to acquaint them with machines, materials and tools, and the ways these will be used in the industries the students intend to enter. By this means the effectiveness not only of their work but of their community life will be enhanced.

#### GEOGRAPHIC SHIFTS

While the location of industries tends to be basically stable, it is nevertheless true that the location is not static. Broad

<sup>16</sup> Charles A. Koepke, *A Job Analysis of Manufacturing Plants in Minnesota*. Employment Stabilization Research Institute Bulletins No. 8, June, 1934. University of Minnesota Press, Minneapolis.

movements into and out of the State, as well as within the State, occur. For example, the development of new areas in the West has influenced employment in, as well as the character of, agriculture in this State. Again, manufacturing employment in New York State, as compared with the country as a whole, declined slightly from 1919 to 1933.<sup>17</sup>

Another type of geographic movement concerns the extent to which industry is becoming more or less concentrated, or more or less decentralized. Studies for the United States have shown that on the whole among industrial plants there has not been a discernible decentralization, in the sense of scattering of industrial plants broadcast, throughout the nation during the last thirty-five years. They do show, however, that there has been a spreading out of industry within the industrial areas, particularly into the periphery areas of cities and into counties of only moderate industrial concentration which do not have large cities.<sup>18</sup> For example, the areas surrounding New York City, Buffalo, Albany, Rochester, Syracuse, Utica, and Binghamton had 15.4 per cent of the wage jobs in manufacturing in 1929, in contrast to 13.0 per cent in 1919. Again, during the 1920's, metropolitan population grew rapidly in the country because of the strong forces toward concentration of certain managerial, professional, and white-collar occupations—a different movement from that of manufacturing wage jobs.<sup>19</sup> Since most jobs of this type must be located where population and income are concentrated,<sup>20</sup> such jobs will no doubt continue to be found predominantly in large cities.

<sup>17</sup> *Trend of Manufactures in New York State from 1919 to 1933*, p. 5. New York State Department of Labor Bulletin No. 189, 1936.

<sup>18</sup> D. B. Creamer, *Is Industry Decentralizing?* p. 11. Study of Population Redistribution, Bulletin No. 3. University of Pennsylvania Press, Philadelphia, 1935.

<sup>19</sup> W. S. Thompson and P. K. Whelpton, *Population Trends in the United States*, pp. 33-34. Recent Social Trends Monographs. McGraw-Hill Book Company, Inc., New York, 1933.

<sup>20</sup> C. Goodrich and others, *Migration and Economic Opportunity*, p. 301. University of Pennsylvania Press, Philadelphia, 1936.

## *Education for Work*

### *Effects of Geographic Movements*

Training programs must take into consideration local opportunities for jobs, even though it is true that some people may migrate to other areas. The location and concentration of job opportunities, then, tend to fix the location and types of training offered. Specifically, in terms of New York State, the implications of the movements mentioned may be stated as follows:

1. The growth in relative importance of industrial peripheries suggests the possibility of developing training programs in such areas.

2. Even though industry is apparently not moving to rural areas, industrial education in such districts should not be completely ignored, since about one out of every nine wage jobs in manufacturing were in 1929 located in the nonindustrial counties of the State.

3. The concentration of office work in cities, particularly the largest ones, indicates that those centers should be the principal places for training such workers. This does not mean, of course, that such centers should be the only places offering this type of education, but that the present widespread and extensive offering of commercial education in rural areas should be modified.

### MOBILITY AND VOCATIONAL ADJUSTMENT

It is evident from the previous discussion that a certain amount of occupational mobility is necessary; otherwise workers could not adjust themselves to existing conditions. F. C. Mills found that "under the prosperous industrial conditions prevailing between 1923 and 1929 one individual worker out of 20 was forced, every two years, to seek employment in a new manufacturing industry, or in a non-manufacturing industry."<sup>21</sup>

<sup>21</sup> F. C. Mills, *Economic Tendencies in the United States, Aspects of Pre-War and Post-*

## *Factors Influencing Vocational Adjustment*

Two kinds of occupational mobility may be distinguished—horizontal and vertical movements. At any occupational level, the characteristic movement seems to be within rather than into or out of the level.<sup>22</sup> In contrast to horizontal movements, there is also vertical mobility, that is, movements upward and downward from level to level, but this does not occur as frequently as is commonly supposed. Differences in individual abilities, in income and in social heritage are factors retarding vertical mobility. A larger proportion of the gainfully employed is in the “dependent” class, that is, in the group that works for others. With the increasing importance of technically trained men in industry, it is becoming more difficult for men to rise from the factory floor. Moreover, the size and complexity of modern industry and the cost of machine equipment limit the opportunity for a workman to become his own boss.

A relatively rigid occupational stratification and a considerable amount of horizontal movement within the levels, particularly among some manual groups, have important implications for our educational system, especially in view of the fact that the number of children attending secondary schools is increasing. For one thing, the program must recognize even more than it has that many, although not all, pupils will remain within a given occupational level and hence should be given a training appropriate to that outcome. In addition, if many of these pupils are to move from one job to another within an occupational level, their education should take this into consideration by avoiding highly specialized training as the primary type of vocational education. Furthermore, the schools should also have available an adequate adult vocational program.

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*War Changes*, p. 422. National Bureau of Economic Research, Publication No. 21, 1932.

<sup>22</sup> P. E. Davidson and H. D. Anderson, *Occupational Mobility in an American Community*, p. 89. Stanford University Press, Berkeley, California, 1937.

C. A. Koepke, *op. cit.*, p. 21.

## CHAPTER II

# Vocational Adjustment of Former Secondary School Pupils

SEVERAL special studies of the Regents' Inquiry contribute information to the problem of the extent to which secondary school pupils become adjusted vocationally. One of the most important of these is the interview study of nearly two thousand former pupils,<sup>1</sup> which was concerned not only with the vocational activities of out-of-school boys and girls, but also with their educational and recreational activities.<sup>2</sup> The latter two activities, however, will not be discussed in this chapter, except for a brief mention of the situations involving

<sup>1</sup> For those interested in the question of the vocational adjustment of secondary school pupils, see Ruth E. Eckert and T. O. Marshall, *When Youth Leave School*, Regents' Inquiry, 1938.

<sup>2</sup> The majority of the pupils selected for interview were among those from sixty of the sixty-two general high schools who had been tested in the spring of 1936 and who had withdrawn from school prior to September 30, 1936. The following groups were not included in the sample: pupils who had entered college, pupils who had transferred to other full-time secondary schools, and a few pupils who were inaccessible, such as those who had enlisted in the Navy or Army, or who had moved out of New York State. The total number interviewed from the general high schools was 1,641, of which 569 were boy graduates, 711 were girl graduates, 196 were boy withdrawals, and 165 were girl withdrawals.

There were 324 pupils interviewed from the twelve specialized vocational schools, where tests were administered in May, 1937. The number interviewed was distributed as follows: 130 boy graduates, 30 girl graduates, 132 boy withdrawals, and 32 girl withdrawals. In the case of these twelve vocational schools, it was not possible to compare the test scores with the interview results, since the testing program for vocational schools was given in May, 1937, rather than in June, 1936, when the pupils of the general high schools were tested.

In all cases the individual and his employer, or another adult acquainted with him, were interviewed. These interviews were held with pupils who had been out of school from six to eleven months.

former vocational pupils. For a consideration of these aspects of the interview study, as well as for a more detailed discussion of the problem of vocational adjustment, the reader is referred to the special report.

In addition to the interview material two other reports contribute to the discussion in this chapter: the study of the future vocational plans of pupils (a phase of the comprehensive testing program) and the reports by school officers on individual leaving pupils.<sup>3</sup>

Although the present report, in its analysis of the curricula in the next few chapters, deals mainly with vocational courses, it is obvious that the problem of vocational adjustment is a pressing one for most general high school graduates who terminate their education with the secondary school. For this reason, what happens to the general high school pupil who has had very little direct vocational preparation is as much the concern of this study as what happens to the vocational pupil, though the outcome of the vocational group is more important in judging the adequacy of the existing vocational program.

#### EMPLOYMENT AND UNEMPLOYMENT

Among the general high school graduates interviewed, a fourth of the boys and almost half of the girls were unemployed. Approximately the same percentages applied to those who withdrew from general high school before graduation, as is shown in Table I. Among vocational school graduates, unemployment was less among boys than among girls.<sup>4</sup>

Comparing the two groups, general and vocational, there was less unemployment among the boy graduates of vocational schools than among the boy graduates of general high schools, while the percentages of unemployed among boy withdrawals in both groups were about the same.

<sup>3</sup> Dr. Ruth E. Eckert was in charge of these studies.

<sup>4</sup> Since the girls interviewed were few in number, the discussion throughout this chapter concerns mainly the boys interviewed.

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Although the proportion unemployed and employed among the graduates and among the withdrawals of general high schools did not differ greatly, there was a marked difference among these groups in the vocational schools. Nearly 82 per cent of the boy graduates of vocational schools were employed full time, while only about 55 per cent of the boy

TABLE I  
PERCENTAGE EMPLOYED AND UNEMPLOYED AMONG GRADUATES AND WITHDRAWALS  
INTERVIEWED

Status of Employment	General				Vocational			
	Graduates		Withdrawals		Graduates		Withdrawals	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Employed full time	60.3	40.2	58.7	41.2	81.5	53.3	55.3	18.8
Employed part time. . . . .	13.9	13.5	14.3	12.1	6.9	10.0	16.7	6.3
Unemployed. . . . .	25.8	46.3	27.0	46.7	11.5	36.7	28.0	75.0

withdrawals were so employed.<sup>5</sup> Part-time employment and unemployment were proportionately greater in the vocational group for boy withdrawals than for boy graduates.

Vocational schools seemingly pay considerably less attention to their withdrawals than they pay to their graduates. This is indicated by the extent to which these schools aided their pupils in getting jobs. They secured jobs for 33.9 per cent of boy graduates and 57.9 per cent of girl graduates, but only for 3.1 per cent of boy withdrawals and 14.3 per cent of girl withdrawals.

### IMPORTANCE OF THE JOB

To the high school pupil who has recently left school and who is not attending another educational institution, the job

<sup>5</sup> The comparison may not be significant for the girl groups because of the number involved, yet it is interesting to note that among those interviewed unemployment was greater among the withdrawals.

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stands out as of major importance. Whether asked directly concerning the major problem confronting them or indirectly concerning the various phases of their current living, the vocational question was revealed as of primary concern.<sup>6</sup> This was especially true among the general high school pupils who were interviewed.

TABLE II  
PERCENTAGE OF RESPONSES DEALING WITH THE JOB GIVEN BY PUPILS IN ANSWER  
TO THE QUESTION, "WHAT ARE THE PROBLEMS WHICH TROUBLE YOU NOW  
THAT YOU ARE OUT OF SCHOOL?"

Problem	General				Vocational			
	Graduates		Withdrawals		Graduates		Withdrawals	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Getting a job. . . . .	19.0	24.1	20.9	21.2	8.5	16.6	17.4	34.4
Advancing to a better job. . . . .	12.7	10.0	8.7	7.3	12.3		11.4	
Getting additional vocational train- ing. . . . .	1.9	3.1	4.1	.6	3.1		3.0	
Planning vocation- al future. . . . .	5.5	3.9	3.1	1.8			1.5	

The relative importance of the responses relating to "the job" given by the pupils in answer to the question, What are the problems which trouble you now that you are out of school? is shown in Table II. The principal concern of nearly a fifth of the boy graduates and a fourth of the girl graduates of general high schools was "getting a job." This problem was not quite so important among the vocational graduates, especially

<sup>6</sup> The youth survey made in Niagara Falls in 1935 by the state TERA disclosed the same interest in employment. In answer to the question, What are the most important things you feel your community can do to help its young people? 66 per cent of the youth between seventeen and twenty-five years of age canvassed in that city gave the answer, "Provide more employment." See *Youth Survey*, p. 26. Niagara Falls, 1935. Mimeographed.

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the boy graduates. This may be due to the fact that the percentage unemployed was less among the boy vocational graduates than among the boy graduates of general high schools. In the vocational schools, "getting a job" was more important to the boy withdrawal than to the boy graduate, which is again probably a reflection of the differences in unemployment between the two groups.

"Advancing to a better job" was the most important vocational problem among boy graduates from vocational schools. The proportion of boy vocational graduates giving this answer was about the same as that of the boy graduates of general high schools. Although the question of advancement was not the most important vocational problem among boy withdrawals in vocational schools, for it was superseded by "getting a job," it was relatively as important for boy withdrawals as for boy graduates in vocational schools and in general high schools.

### NATURE OF THE PRESENT JOB

#### *Type of Present Employment*

The classes of jobs held by former vocational school pupils are shown in Table III. Four out of every ten boy graduates were learners in a trade. The next two most important classifications were repetitive manual work and clerical work. Among boy withdrawals, learners in a trade was also the most important classification, although not so important as it was among boy graduates. At least 10 per cent of the boy withdrawals were in each of these groups: repetitive manual, messenger work, physical labor, and service (personal contact).

Nearly 50 per cent of the boys worked in plants employing 100 or more workers, while the girls were employed on the whole in much smaller establishments.

#### *Present Wage*

On the average, the vocational pupils consistently were receiving higher wages than were the general high school

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pupils. For example, boy graduates of vocational schools were receiving as a median wage \$18.50 a week, while boy graduates of the general high schools were receiving \$14.63. Part of this difference among boy graduates might have been due to the fact that a larger proportion of the former vocational pupils lived in cities, but even for those boys living in New York City

TABLE III  
PERCENTAGES OF FORMER PUPILS CLASSIFIED ACCORDING TO PRESENT JOBS\*

Classification	Graduates		Withdrawals	
	Boys	Girls	Boys	Girls
Clerical. . . . .	13.9	10.5	6.2	
Learners in professions. . . . .	3.5			
Learners in trades. . . . .	40.0	26.3	27.8	14.3
Machine work. . . . .	6.1	21.1	3.1	14.3
Messenger work. . . . .	4.4		12.4	
Physical labor. . . . .	3.5		12.4	
Repetitive manual. . . . .	19.1	15.8	15.5	14.3
Sales. . . . .	4.4		7.2	14.3
Service—personal contact. . . . .	3.5	21.1	10.3	42.9
Service—nonpersonal contact. . . . .		5.3	3.1	
Supervisory assistant. . . . .	1.7		1.0	
Not given. . . . .			1.0	

\* The occupational classification used here was devised by the Junior Division of the New York State Employment Service.

the difference was significantly in favor of the vocational group. Although the differences among the other groups of pupils do not have perfect statistical significance, the fact that the vocational groups were higher in all respects is worth noting.

### *Chances of Advancement*

Former vocational pupils thought that they had a chance to advance beyond their present jobs, and they believed that the advancement would materialize in the near future. In checking the individual's attitude with the employer's opinion, it was found that the two generally agreed.

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The vocational graduates had a better chance of advancement than had the nongraduates. According to employers' statements, 82.6 per cent of the employed boy graduates and 78.9 per cent of the girl graduates had a good chance of advancement, while only 61.9 per cent of the boy and 57.2 per cent of the girl withdrawals had a good chance. About 26 per cent of the boy graduates and 42 per cent of the girl graduates were expected to advance within six months.

The employers believed that 29.8 per cent of the boy graduates of vocational schools and 16.5 per cent of the boy withdrawals would remain in the same type of work but would obtain a higher rank. The employers expressed the opinion that 36.8 per cent of the girl graduates<sup>7</sup> would keep the same job but would get more money. Among vocational pupils, changes were also predicted in the type of work done. Of these vocational pupils, promotion to a different type of work was predicted for 14.7 per cent of the boy graduates, 13.3 per cent of the girl graduates, 25.4 per cent of the boy withdrawals, and 37.5 per cent of the girl withdrawals. None of the vocational girls will be advanced to positions of leadership, but 11.6 per cent of boy graduates and 7.5 per cent of boy withdrawals will.

The statements of graduates and of withdrawals of general secondary schools and of their employers present a different picture. Of the full-time employed groups, 60.5 per cent of the boy graduates, 46.9 per cent of the girl graduates, 59.0 per cent of the boy withdrawals, and 37.3 per cent of the girl withdrawals had a good chance for advancement, according to their employers. Except for the percentage for the girl withdrawals, who were much more pessimistic about their chances for advancement, the percentages of the employers are close to those derived from the pupils' own statements.

According to employers, from 14 to 21 per cent of the general pupils now employed on a full-time basis will be advanced in

<sup>7</sup> Only a few were interviewed.

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rank in the same general type of work. The percentages of those who will keep their same jobs, but who will be advanced in pay, are: 4.7 per cent of the boy graduates, 9.3 per cent of the girl graduates, 4.2 per cent of the boy withdrawals, and 11.8 per cent of the girl withdrawals. Many boys, 21 per cent of graduates and withdrawals, will be promoted to another type of work. About 8 per cent of the girl graduates and 10 per cent of girl withdrawals will also be promoted to a different type of work.

### *Attitude toward Present Job*

On the whole, former vocational pupils had a more favorable attitude toward their jobs than had former general high school pupils, but for reasons somewhat different.

The reasons given by former vocational pupils for liking their present jobs were ranked approximately as follows:

1. Because it is challenging; offers new problems, etc.
2. Because it has a future; chance for advancement, etc.
3. I like the work (and other similar general statements).
4. Good salary; I like the weekly pay checks.
5. Because I can learn a lot; I'll learn to become a                   ; a good chance to get training (these are similar to (2), but the emphasis is on "training for the future" rather than on "good possibilities for advancement from the present job").

Former general high school pupils were less satisfied with their jobs. In practically all communities and economic classes, large numbers of these young persons who had attended general high school were discontented if they were forced to work at other than white-collar jobs.

## VOCATIONAL ASSISTANCE OF THE EDUCATIONAL PROGRAMS

### *Relation of Training to Employment*

The occupations in which the former pupils of general high schools engaged immediately after leaving school were only

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slightly related to the school curricula. Apparently in many cases these pupils took whatever jobs they could get.

In general, intelligence seemed to be the only factor considered by most general high schools in making curricula groupings. Hence, the college entrance group contained many pupils who did not want to go to college or who did not have the money to go. Many commercial diplomas have been given to pupils in communities where there has been a scarcity of clerical jobs, and industrial diplomas have often been given to pupils who were failures in other curricula, irrespective of their aptitude for industrial work.

What was the situation regarding the relation of training to employment among former vocational school pupils? Did such pupils work at the trade for which they were trained? Table IV shows the proportion of former pupils working at the job for which they were trained, those not trained for their present job, and those whose present job required no training.

TABLE IV  
RELATION OF VOCATIONAL TRAINING TO SUBSEQUENT EMPLOYMENT  
AMONG FORMER VOCATIONAL PUPILS, IN PERCENTAGES

	Graduates		Withdrawals	
	Boys	Girls	Boys	Girls
Working at job for which trained . . . . .	63.5	78.9	24.8	28.6
Not trained for present job . . . . .	31.3	15.8	70.1	57.1
Present job requires no training . . . . .	5.2	5.3	5.2	14.3

Of the boys who were graduated from the vocational schools in June, 1936, 63.5 per cent were working at the jobs for which they were trained. The placement records<sup>8</sup> as reported by the schools show that 63 per cent of the graduates of June, 1936, were employed in trades for which they were trained. In this

<sup>8</sup> See pages 87-88 for a discussion of the nature of these placement statistics as reported by the schools.

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instance there is a surprisingly close correspondence between the two percentages.

Undoubtedly, the immediate employment of boy vocational graduates bears a closer relationship to the training received in school than is true for former pupils in general high schools. Nevertheless, the fact that 31.3 per cent of these vocational graduates were not trained for their present jobs and that 5.2 per cent were in jobs which required no training raises the question, Was the training of this large number of students appropriate? The schools should be concerned as much with this one-third as with those placed in the trades for which they were trained.

The record for the boy withdrawal was poor. Seventy per cent of the withdrawals were not trained for their present jobs. Incidentally, many had had two, three, or nearly four years of vocational work before withdrawing. Having been only partially trained by the schools, many of them sought whatever type of work they could get. Their situation is comparable to that of many former general high school pupils. If methods of selection in the vocational schools had been more adequate and their programs more appropriate, much of this loss might have been eliminated.

### *Employers' Attitudes toward Curricula*

With regard to general high schools, employers tended to consider the school curriculum merely as a convenient device for sifting out desired levels of intelligence. For example, certain employers took only the graduates of a college preparatory curriculum, not because they attached particular value to the curriculum, but because they thought they would thus secure brighter pupils.

If this situation had held true in the vocational schools, their graduates would have been severely handicapped. Since vocational schools have commonly judged the success of their work by the extent to which they have created a favorable

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market for their product, they have in most cases bent every effort to see to it that the product was acceptable. This partly accounts for the number of dropouts in some schools, since certain pupils may not be able to maintain the trade standards established by the school. Furthermore, because withdrawals obviously are not as well trained as the graduates, this situation also partially accounts for the lack of concern over such withdrawals.

Over a long period, many vocational schools have built up a reputation regarding the quality of their graduates. In a few instances the school's reputation extends beyond the locality in which it is situated. Continuous contacts with employers, interest in seeing to it that the graduates are competent beginners in employment, and the infiltration of former pupils of these schools into many establishments have given these schools an exceedingly favorable position in placing their graduates.

Some vocational schools in the State, however, have a poor reputation. In fact, attendance at certain schools is not an asset, but a liability to the pupil. Poor equipment, inadequate supplies, and the congregation of mediocre and inferior students in these schools has stigmatized the graduates as "undesirables."

With reference to the vocational schools, the employers expressed their attitude toward the school as a whole rather than toward the curriculum in particular, as was the case in the general high schools. This situation may account for the lack of any desire on the part of many vocational schools to develop programs for handicapped groups, fearing that the reputation of the school would be jeopardized by working with such pupils.

### *Pupil Deficiencies*

Many pupils graduate from general high schools with serious deficiencies in the basic skills of arithmetic, spelling, and language. Many mentioned these deficiencies as handicaps

## *Vocational Adjustment of Former Pupils*

in their vocational activity, and employers frequently mentioned them as a source of dissatisfaction with employees.

With reference to former vocational pupils, employers did not mention these deficiencies in skills, for only a small number of these pupils were working at jobs in which such deficiencies would have been sufficiently noticeable for comment. That these pupils were no better off than the general high school pupils was confirmed by the results of the tests given to vocational pupils in May, 1937. Although the arithmetic and silent reading test scores of vocational pupils were at about expectancy, it should be remembered that the scholastic aptitude of these pupils was lower than that of the general high school students.

### VOCATIONAL ASSISTANCE RENDERED BY THE SCHOOLS

#### *Vocational Choices of the Pupils*

General high schools have apparently had little direct influence on the vocational choices of their pupils. The leaving pupils interviewed, both graduates and nongraduates, knew little about occupations that were open to them. The best among them had only hazy notions as to the required aptitudes and training possibilities for advancement, wage scales, working conditions, or even chances of employment. Some were even misinformed regarding the occupations in which they were currently employed.

Most of the former general high school pupils stated that they could not recall having received any advice about curriculum at the time they were making a choice. Elective courses were usually decided upon by pupils without guidance or with only superficial assistance from the school.

It is not strange, therefore, that many individual pupils expressed unwise and unpractical vocational desires at the time they left school, as was disclosed by the questionnaire concerning their future vocational plans, given as a part of the

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testing program. Though specific vocational choices were roughly geared to the average abilities and financial resources of the pupils, many of them aimed far higher than the abilities which they had previously demonstrated would permit them to go. On the other hand, large numbers of pupils in the highest intelligence and achievement groups looked forward to vocations which would never offer a real challenge to them.

Many general high school pupils reached graduation without having made an intelligent decision concerning their futures. Those who planned to work often arrived at the very end of their secondary school careers without developing job consciousness, or any intelligent understanding of the opportunities for employment in their own community. Among the majority of pupils who left before graduation, the steady influence of a vocational objective lying within their probable sphere of attainment was lacking. Even those who had plans disclosed an overoptimistic attitude toward attaining their objectives. In addition, such pupils exhibited an inflexibility of attitude which would make it difficult for them to adjust to changing economic conditions.

How does the situation regarding the leaving pupils from vocational schools compare with that found among former pupils of the general high schools? The vocational school should have more influence on the vocational choice of its pupils than the general high school has. Yet many vocational pupils questioned reported that they received little advice from the schools concerning their curriculum choices. Of the boy graduates 76.2 per cent stated that they had been advised by no one at the time they made curriculum choices. Only 5.4 per cent said they were advised by senior high school counselors and only 2.3 per cent by junior high school teachers. Many of these boys have definitely decided upon a vocation when they enter the vocational school—in many cases without the advice of parents or other members of the family—and hence the schools can have only slight influence on their choice. Some schools

## *Vocational Adjustment of Former Pupils*

attempt to guide pupils when they enter. Many others have no systematic guidance program, but leave the choice to the individual. When a course is so attractive that the school facilities cannot accommodate the number of applicants, a selective system is practiced, but the method used is largely to select according to previous school marks, with the result that many applicants who might profit by the instruction are sent elsewhere—frequently back to a general high school. Sometimes when enrollments in certain courses are completed, promising applicants are encouraged to enroll in other courses, in which they may not be particularly interested. This frequently produces dissatisfaction and results in dropouts.

Vocational pupils interviewed naturally tended to know something about the trade for which they were trained. They were job conscious when they entered school, and spent 50 per cent of their school time in shop preparation for a trade. This accounts for a considerable part of the favorable attitude which former vocational pupils had toward their present jobs.

### *Ability of the School To Give Vocational Advice*

General high schools are frequently not in a position to give dependable vocational advice. In fact, many cases were found where the school actually had given wrong advice. One school, for example, recommended pupils for admission to an apprenticeship course in a local company even though many such pupils had not taken the high school subjects required for admission. It would seem that the persons giving the advice had never taken the time to find out what was expected of the applicant.

In many communities, the relationship between the general high school and industry was not cooperative. From the employers' point of view, general high school people for the most part know little about local occupations.

The above statements do not apply to most of the vocational schools. These schools usually give helpful advice, and the

The presence of reputedly excellent guidance facilities in the general high schools where these pupils were enrolled had no observable effect on the nature of the pupils' plans for the future. Pupils from schools whose guidance facilities were rated as outstanding by the State Education Department showed the same vagueness in their plans as characterized the replies of pupils from other schools. Pupils had made rigid plans quite as often in schools maintaining organized guidance programs as in schools offering no such service.

The interview study disclosed that irrespective of the type of community or the occupation in which their parents were engaged, a majority of the former pupils of general high schools, at the time interviewed, wanted white-collar jobs. They were discontented and unhappy when they found it necessary to take any other type of job. For example, one boy, whose father is an odd-jobs man, graduated from high school at twenty-one years of age and stayed for two additional years of postgraduate work. He will take no job except a clerical one, which, he says, "a high school diploma entitles me to." In addition to low intelligence, the boy is handicapped by a speech defect. Many looked forward to entrance into the professions, even though there was little chance that their hopes would be realized. Many pupils from homes classified as "poor" or "indigent" wanted to become nurses, teachers, engineers, and lawyers. A girl whose father is dead and whose mother earns thirteen dollars a week in a dress factory, said she wanted to go to college in order to become a teacher. She stated that the school had advised her to take the college preparatory course. Although she has high hopes, there is little chance that she will ever have enough money for college.

As far as the present job is concerned, the above situations do not apply to the vocational students. Their attitudes toward their present jobs, as mentioned earlier, were more favorable. Nevertheless, large numbers did want to enter the professions. Among boy graduates, 24.6 per cent wanted to enter profes-

## *Vocational Adjustment of Former Pupils*

sions, and 13.6 per cent of the boy withdrawals hoped to do the same thing. About one half of the boys who wanted a professional career looked forward to the field of engineering. Most of these former pupils realized they would need to go to college if they were to reach a professional goal. Many of them undoubtedly will not be able to do so.

A job in the manufacturing field was naturally the vocational outlook of the largest group of these vocationally trained young people. Thirty-seven and seven-tenths per cent of the boy graduates and 50 per cent of the boy withdrawals gave manufacturing as their goal.

Former vocational pupils seemed more optimistic about their vocational future than did the former pupils of general high schools. The vocational boy graduates aimed higher than the boy graduates of the general high schools, but the aims of the dropouts in the two types of schools were about the same. When one considers that many of the vocational pupils came from handicapped homes (33.1 per cent of the boy graduates and 49.3 per cent of the boy withdrawals came from homes classified as "poor" or "indigent"), that the nature of their training was largely manual in character, that the scholastic aptitude of many of them was low, one doubts if any large number of these pupils will be able to attain their objectives.

### *Seeking Advice from the Schools*

The majority of the general high school pupils did not consider the schools as an agency for giving advice, and only infrequently returned to the school in order to seek it. As a matter of fact, many pupils who were interviewed doubted the ability of the school officers to give dependable advice on non-scholastic affairs.

Vocational graduates returned to the school for advice more frequently than did the general high school graduates. In response to the question, Have you ever gone back to the school for advice or help? 44.6 per cent of the boy graduates of voca-

tional schools said "yes," while only 23.2 per cent of the boy graduates of general high schools gave the same response. The proportion of "yes" responses among boy withdrawals in both types of schools was about the same—about 15 per cent—which suggests again that the vocational schools are less concerned with dropouts than with graduates.

*Seeking Additional Vocational Training*

Only one or two former general high school pupils out of one hundred, at the time of the interviews, were training for their next jobs in public evening or vocational schools. A much larger proportion enrolled in courses offered by private proprietary schools. Many cases of exploitation were found among this latter group.

Only a few among the vocational group interviewed were receiving any formal training for their next job. Many of them believed experience would train them. For example, 47.8 per cent of the boy graduates believed that experience was all they needed in order to advance.

ACTIVITIES OTHER THAN WORK  
OF VOCATIONAL PUPILS

Though the graduates of vocational schools appeared to be getting along fairly well at their jobs, apparently they were not doing much else of a constructive nature. They were using their leisure time less effectively than were the former general high school pupils.<sup>11</sup> Among former vocational pupils the boy withdrawals seemed to be using their leisure time less effectively than were the graduates, although there was less employment, and hence more leisure time, among the withdrawals.

<sup>11</sup> The remainder of this section will discuss, unless otherwise stated, the out-of-work activities of former vocational pupils.

See Ruth E. Eckert and T. O. Marshall, *When Youth Leave School*, Regents' Inquiry, 1938.

## *Vocational Adjustment of Former Pupils*

The reading activities of former vocational pupils were rather meager. Approximately three-fourths of these young people had not read any part of a book during the two weeks preceding the interview. The fiction read was largely of an inferior type. About three-fourths of the boys interviewed read magazines. About two-thirds of the boy graduates read some magazines which contained nonfiction, but only a third of the boy withdrawals read magazines of this type. Most of the latter group read the type of material which is produced by pulp writers and published in cheap magazines, such as are frequently seen on display in drug stores. Most of the former pupils read newspapers regularly.

Forty-five per cent of the boy graduates and about two-thirds of the boy withdrawals belonged to no clubs or groups of any kind. At least 80 per cent of the boys played games and entered into sports of one kind or another. About two-thirds of them had hobbies, a larger proportion than was the case with the former general high school pupils.<sup>12</sup>

Practically all those interviewed were movie fans. About 20 per cent of the boy graduates and nearly 30 per cent of the boy withdrawals attended motion pictures twice a week. At least 95 per cent of the vocational students listened to the radio, with variety and popular music and comedy the favorite types of program. Only 4.6 per cent of the boy graduates listened to news commentators, as contrasted with 15.1 per cent of boy graduates of general high schools; and 10.0 per cent listened to sports, as contrasted with 3.0 per cent of the boy graduates of general high schools.

Of the boy graduates of vocational schools, 35.4 per cent stated that they did not participate in home activities of any kind. Of the boy graduates of general high schools, 24.2 per cent stated that they did not participate in home activities.

<sup>12</sup> In the case of hobbies, and of home activities, shortly to be discussed, the coding was extremely liberal. Hence the statistics given in the text undoubtedly overstate any favorable condition mentioned.

## *Education for Work*

Nearly 65 per cent of the boy graduates of vocational schools stated that they were doing no studying of any kind.

### EXTENT OF VOCATIONAL ADJUSTMENT

From the previous discussion of the data on the vocational adjustment of secondary school pupils during the first six to eleven months after they had left school, the following generalizations can be made:<sup>13</sup>

1. The graduates of vocational schools were probably better adjusted vocationally than were the general high school graduates, but both groups needed help and encouragement from adults.

2. The graduates seemed to be better adjusted vocationally than the nongraduates, especially those from vocational schools.<sup>14</sup> The difference did not seem as marked between the graduates and nongraduates of general high schools.

3. The former general high school pupils were probably using their leisure time more effectively than were former vocational students. However, the out-of-work activities of both groups could be considerably improved.<sup>15</sup>

It is not possible to say from the data used in this study whether the situation would have been different if the interviews had been conducted later than from 6 to 11 months after the students had left school. At the beginning of the interview study it was thought desirable to select a representative sample of pupils who had been out of school five years, but lack of sufficient accurate and detailed records by the schools made this impossible. The Inquiry was therefore forced to restrict its investigation to those pupils who had just finished school.

<sup>13</sup> For a more detailed discussion, see Eckert and Marshall, *op. cit.*

<sup>14</sup> The data for girls in vocational schools were disregarded because of the small number of cases.

<sup>15</sup> For the detail discussions upon which this conclusion is based, see Eckert and Marshall, *op. cit.*

## CHAPTER III

# Secondary School Programs and Vocational Adjustment<sup>1</sup>

A STUDY of the present program of vocational education in New York State might be made in one of two ways. Each special program might be taken up separately and considered in detail, or a comparative study might be made of the various programs in terms of certain problems, such as objectives, admissions policies, and courses offered. Since the first approach has been made in the special reports of the Regents' Inquiry, it would seem advisable to use the second in this and the following chapters. An additional reason for this procedure is the desire to examine the program as a whole rather than in part. The total offerings in the several fields and the various ways each offering attempts to handle different problems are of special interest.

### TYPES OF COURSES

New York State offers a wide variety of courses which, directly or indirectly, are concerned with the problem of training for initial vocational adjustment. These courses may be conveniently grouped as follows: agriculture, homemaking, business (or commercial), technical, and industrial.

<sup>1</sup> This and the following three chapters are based on special materials on file with the Regents' Inquiry. Professor Z. M. Smith of Purdue University, State Supervisor of Agricultural Education for Indiana, is responsible for reporting on vocational agriculture; Miss Alice L. Edwards, member of the President's Advisory Committee on Education, for reporting on home economics and homemaking; Dr. Walter B. Jones, Chief, Division of Industrial Education, Pennsylvania Department of Public Instruction, for reporting on industrial and technical education; Dr. Harold G. Shields, Associate Professor of Business Education, University of Chicago, for reporting on business education.

## *Education for Work*

The State Education Law authorizes local communities to offer several strictly vocational courses. Section 610a of the law states that

The board of education of each city and of each school district may establish, acquire, conduct, and maintain approved vocational schools and classes, the controlling purpose of which shall either be the preparation or else the improvement of the pupils enrolled therein for useful employment in trade, industrial, agricultural, commercial or homemaking occupations.<sup>2</sup>

In addition, many secondary schools offer instruction in industrial arts, home economics, and commercial subjects.

The New York State educational system makes provision for three types of courses in vocational agriculture: (1) all-day instruction in high school departments of vocational agriculture, as well as instruction in the six state schools of applied agriculture; (2) part-time curricula given during the winter months for boys and young men, not in school, who are farmers; and (3) 4-H club or junior project work for boys enrolled in the upper grades of rural schools tributary to the high schools or in the grades of local schools. Only all-day instruction in high school departments will be discussed in detail in this report.

The state program of home economics education is composed of two types of courses: (1) homemaking which is conceived as a vocational course and (2) home economics which is nonvocational.

Instruction in commercial subjects is offered in two types of courses in the secondary schools: (1) the traditional commercial, or business education, course offered usually in the general high schools and (2) the vocational commercial course, which has been developed as a result of the passage of Chapter 250 of the Laws of 1935, and which is offered in vocational schools.

<sup>2</sup> The University of the State of New York, *Education Law as Amended to July 1, 1936*, Bulletin No. 1095, 1936, p. 229.

## *Secondary School Programs and Vocational Adjustment*

Vocational technical courses, given in the secondary schools, offer unit technical courses planned to prepare pupils for useful employment in "junior engineering" occupations.

There is a wide variety of types of courses offered in the field of industrial education, ranging from the nonvocational industrial arts courses to courses that train for a highly skilled trade. Some idea of the different types of the vocational industrial work may be obtained from noting the variety of vocational schools of less than college grade which may be established. These are the trade schools or industrial high schools, general industrial high schools, general vocational schools, apprenticeship training schools, compulsory continuation schools, part-time cooperative schools, occupational extension or trade extension schools, and arts and crafts schools.

To include a discussion of all the types of industrial schools would only invite confusion.<sup>3</sup> We are concerned here chiefly with the industrial high school; others will be referred to later.<sup>4</sup> Unless otherwise stated, all generalization will apply to the following fields: all-day vocational agriculture, vocational homemaking and home economics, business education, vocational technical, and all-day vocational trade and industrial courses.

### OBJECTIVES

With the exception of home economics and business education courses, all others are specifically organized for the purpose of preparing the enrolled pupils for useful employment in industrial, technical, agricultural, commercial, or homemaking occupations.

<sup>3</sup> The "general vocational school" will not be considered, since that is merely a technical name which may be applied to a school offering two or more types of approved vocational training, such as trade and industrial courses, general industrial courses, and technical courses. Neither does it seem advisable to discuss the arts and crafts school, since there is only one in the State, and since the Regents have not set up rules for the conduct of such schools.

<sup>4</sup> See also Chapter VI.

## *Education for Work*

Like industrial arts in the industrial field, home economics courses, as defined by the State Education Department, are not considered vocational courses. They are intended to contribute to the general education of the pupil by aiding in his understanding of the social and economic needs of the individual and the family.

Although not organized under the sections of the Education Law dealing with vocational education, the traditional commercial, or business education, course is conceived by commercial teachers to have as its dominant objective the preparation of students for vocational life. By vocational, clerical is meant. More specifically, the purpose of this course is to train pupils to become stenographers, typists, office machine workers, and other routine workers.

There seems to be no evidence that either school administrators or commercial teachers consider training pupils to understand business relationships or concepts as a part of one's general education to be an objective of secondary business education. Nor is business education considered as fundamentally a form of economic education in which pupils are taught a series of understandings or generalizations concerning business relationships. Nor is it concerned with training for positions which may ultimately involve managerial responsibility. Business education is thought of largely in vocational and clerical terms.

In contrast to home economics and business education, the other fields are organized under the provisions of the Education Law dealing with vocational education and are specifically vocational in character. According to the State Education Department, "instruction in a high school department of vocational agriculture is designed to prepare boys and young men, attending school or working on farms, for a farming occupation."<sup>5</sup>

<sup>5</sup> The University of the State of New York, *High School Departments of Vocational Agriculture*, Handbook 41, 1937, p. 5.

## *Secondary School Programs and Vocational Adjustment*

A teacher of vocational agriculture stated the objective of this course in these terms:

The fundamental aim of a course in vocational agriculture is to train present and prospective farmers for proficiency in farming. In particular, it is the aim of this course to train farm boys to carry on successfully the type of farming found in the community in which they reside.<sup>6</sup>

Courses in vocational homemaking are organized for the purposes of training for homemaking and of giving "the pupil some idea of opportunities growing out of this field which may be used for wage earning."<sup>7</sup> The work in this course and in home economics is adjusted to the needs of individual pupils. For students of low intelligence an attempt is made to develop mechanical skills of a more or less routine character. Teachers attempt to help pupils of higher intelligence to develop good social and economic standards and appreciations, which will prepare them for activities calling for ability in management and leadership so that they will be able to go forward with homes and community responsibilities.

As yet the Board of Regents has not established rules governing vocational commercial courses, although a number of vocational schools are offering this type of work. Presumably the rules, when put into effect, will emphasize practical work to a greater degree than it is now emphasized by the ordinary commercial courses. If organized on the same basis as the vocational industrial course, this work will consume at least half of the pupil's time while in school.

The major objective of the unit technical courses is vocational, the preparation of pupils for employment in industrial occupations requiring technical training, that is, "in fields where knowledge of processes or methods is of more impor-

<sup>6</sup> This is typical of many of the statements received from teachers of vocational agriculture.

<sup>7</sup> The University of the State of New York, *Homemaking and Home Economics in the High School*, Handbook 43, 1936, p. 4.

## *Education for Work*

tance than skill of hand.”<sup>8</sup> The attempt is made to have the fundamentals of science, mathematics, drawing, shop work, and technical information thoroughly mastered by having a closely integrated program in which each part relates to the whole.

The aim of the vocational industrial courses is the preparation of young people for successful entrance into specific trades and industrial occupations, which are classified primarily as skilled or craft.

The following questions arise in connection with the objectives of these various courses: Are there any satisfactory measures for determining the degree of success in attaining these objectives? Do pupils reach these objectives? What evidence is there that these objectives are valid?

### *Attainment of Objectives*

Apparently most officials have very little information as to what degree of success their graduates have attained or were capable of attaining toward the various objectives. Few, if any, measurements are used to secure information on these two points. Principals of schools in which business, industrial, agricultural, homemaking, and home economics courses were taught were questioned in an attempt to determine whether the level of attainment sought by the schools in a training program was in general too high or too low.<sup>9</sup>

### *In Agricultural Courses*

The principals were asked, What percentage of the pupils completing your training in agriculture will probably be competent to be independently responsible farm managers

<sup>8</sup> University of the State of New York, *Thirty-Second Annual Report of the State Education Department*, Vol. I, p. 152, 1937.

<sup>9</sup> This information was partly secured through the use of detailed questionnaires.

## *Secondary School Programs and Vocational Adjustment*

or managers of business or service agencies closely related to agriculture? The fifty-five replies ranged from zero to 95 per cent. In response to the question, What percentage of the pupils completing your training in agriculture will probably be competent only as employees working under supervision of farm managers or managers of business or service agencies closely related to agriculture? the answers of the fifty-five principals ranged from zero to 100 per cent. The wide variations in these percentages would seem to indicate either that there was a considerable amount of guessing concerning the degree of success or else the answers concerned a poor selection of students, for thirty out of fifty-one principals replied that from 5 to 30 per cent of the pupils who undertook the work of vocational agriculture would probably require so much supervision that it would be unprofitable to hire them. The principals attributed the lack of desired abilities among their students to low intelligence, lack of interest in the work, no opportunity for practical experience on the farm, lack of responsibility, or home environment.

### *In Commercial Courses*

A considerable number of principals reported that many business graduates are not employable at the going rate for beginners—the range here was from zero to 100 per cent with 17 out of 58 principals reporting that at least 60 per cent of their pupils were not employable at the going rate for beginners. Principals were also asked, What percentage of the pupils who undertake the work required in your business courses will probably require so much personal supervision as to make it unprofitable for an employer to hire them? Here the range was also from zero to 100 per cent, with 37 out of 58 replying that over 10 per cent of the pupils were in this class. The reason for this situation appears to vary with the schools, but the most common reasons given are: low intelligence, racial factor, lack of background, lack of training, home training, lack of neat-

## *Education for Work*

ness and accuracy, irresponsibility, and poor personality. Nevertheless, 30 per cent of the principals stated that their schools attempted to graduate as many pupils as possible who were well enough trained to compete with adult workers. Here, as in the case of vocational agriculture, an objective measurement of the degree of success in obtaining the aims is lacking. In addition, there is a difference of opinion as to what the level of attainment should be, and a realization that many pupils do not attain the existing level.

### *In Homemaking Courses*

No accurate measures seem to be generally employed to determine the attainment of homemaking and home economics pupils. Most teachers and principals who commented on this subject, considered that factors other than those mentioned earlier were important in determining the degree of competence possessed by their graduates. The factors most frequently mentioned were: the pupil's level of ability, the type of home the pupil came from, the amount and extent of the pupil's participation in home activities, and opportunities for leadership and experience outside the home and the home economics class.

That home economics training has very distinct social and economic values seems to be generally accepted. The principal of one school stated that county workers report better conditions and better understanding in the homes of underprivileged low-wage groups and among comparatively low mental groups, in which the wife, although she did not finish high school, had finished one to three years of work in homemaking.

### *In Industrial and Technical Education*

Considerable variation was also found in the answers to similar questions given by principals of vocational trade and

## *Secondary School Programs and Vocational Adjustment*

industrial schools. Ten of the nineteen vocational school principals stated that all of their graduates would be employable at the going rate of pay for beginners in the occupations for which they were trained. Some stated that poor students had been dropped from the course. In one small city (owing to local conditions) the percentage of unemployables at the going rate of pay for beginners ranged from 100 per cent in woodworking to a negligible percentage. In another city it was estimated that 40 per cent of the graduates were unemployable due to lack of skill, of ambition, and of honest desire to be a good mechanic. From fifteen to 20 per cent of the graduates of an electrical course in a technical school and from 20 to 25 per cent of the graduates of a mechanical course were employable only at a below-average entering wage because of physical and mental laziness, failure to cooperate with others, poor health, and inability to work. In one girls' two-year vocational school, as many as 45 per cent of the graduates in the general business course and in trade dressmaking were below the expected level of attainment. One large school stated that it had no machinery to enable it to determine whether its graduates were or were not employable at the going rate for beginners.

Directors of the industrial and technical schools were also asked the question: What percentage of the pupils who meet the requirements of your courses are equipped to earn more than the going rate of pay for beginners? One director stated that all his graduates earn more than the going rate for beginners, some receiving journeymen wages in a few weeks. Another stated that all the members of the 1937 class were employed at more than the prevailing rate. One technical school principal stated that his graduates were not classified as beginners and that they often achieved positions of responsibility within a year. Seventy-five per cent was given by another technical high school principal as the proportion of graduates receiving above-average entering wages.

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Although most of their answers were qualified, a few directors stated that from 5 to 30 per cent of their graduates could successfully compete with twenty-five-year-old adults. The prevailing opinion among principals of industrial schools was that competition with adults was not desirable and that it was absurd to try to train boys to be journeymen mechanics.

In interviews with principals of industrial and technical schools the prevailing opinion expressed was that employers should recognize vocational school training on an advanced apprenticeship basis. The desirable amount of credit ranged from a negligible percentage to approximately 50 per cent of the journeymen's wage. The director of a printing course stated that it was impossible for his graduates to receive any credit for the work done in the school, in spite of the fact that the work was decidedly excellent according to the opinion of three impartial printing experts from another state.

### *Conclusion*

It would appear from the evidence presented that, in some types of courses, the objectives sought were not valid. Far too many graduates were unable to reach the established levels of attainment. In some cases these levels would seem to be exceptionally high, while in others, even with a minimum level of employment at only the beginner's wage as the desired level, many schools reported that large numbers of graduates were incapable of arriving at this standard.

### EXTENT AND AVAILABILITY OF VOCATIONAL EDUCATION

Business education is the most prevalent type of course with a vocational content offered in New York State. Enrollments in this course in the secondary schools are the largest of any single field with the exception of English. In 1937 the total number of students in New York State taking one or more commercial subjects was 549,325.<sup>10</sup> This figure includes some

<sup>10</sup> New York State Teachers Association, Circular No. 20, June, 1937.

## *Secondary School Programs and Vocational Adjustment*

noncommercial students as well as those pursuing the regular commercial course. There is no evidence to indicate that the number of commercial students will not continue to increase.

The next most important type of vocational education is in the trade and industrial field. In the school year 1935-36 there were 56,661 all-day pupils enrolled in these federally aided classes.<sup>11</sup> Of this number, 31,912 were boys and 24,749 were girls. This work has increased at a phenomenal rate during the last few years. The increase in the enrollments of 1935-36 over 1934-35 was practically identical with the total number enrolled in 1926-27, as is evident from Table V. Even as recently as 1928-29 there were only 13,614 pupils in this type of vocational work. Job scarcity during the depression, amendments to the Education Law in 1935, giving these schools equal status with other high schools, and an aggressive state leadership, have contributed to this remarkable development. In addition, all-day industrial education fell heir to space, facilities, and teachers, due to the decline in part-time continuation enrollments.

Homemaking and home economics have also shown a rapid growth during the depression. Between 1930 and 1934 the number enrolled in home economics increased from 11,465 to 31,660, or nearly 176 per cent. Homemaking enrollments increased from 10,944 to 15,341, or 40 per cent. In 1934 the combined enrollment of these two courses was equivalent to 16 per cent of the total number of girls in high schools.<sup>12</sup>

Vocational technical education has had commendable increases each year and has grown consistently. With an enrollment of only 309 in 1920-21 this type of secondary

<sup>11</sup> The enrollment in New York State equaled 39 per cent of the total number of pupils taking all-day trade and industrial work in the United States.

<sup>12</sup> These figures are derived from the statistics published by the State Education Department and should be considered only as an approximation of the number enrolled.

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education within fifteen years (1935-36) was serving 13,520 pupils. Unlike vocational industrial enrollments, the number of students in technical courses did not expand at any phe-

TABLE V  
ENROLLMENT IN THREE TYPES OF VOCATIONAL EDUCATION IN APPROVED COURSES  
IN NEW YORK STATE\*

School Year	Vocational Agriculture Full- time and Day-unit Courses, High School Depart- ments of Agriculture	All-Day Trade and Industrial Courses Receiving Federal Aid	Vocational Technical Courses
1911-12.....	366		
1912-13.....	551		
1913-14.....	606		
1914-15.....	855		
1915-16.....	1,183		
1916-17.....	1,298		
1917-18.....	1,385	5,844	
1918-19.....	1,114	5,941	
1919-20.....	1,138	6,613	
1920-21.....	1,366	7,798	309
1921-22.....	1,484	8,895	840
1922-23.....	1,472	9,348	1,975
1923-24.....	1,478	9,355	2,744
1924-25.....	1,479	10,403	3,162
1925-26.....	1,513	10,761	3,847
1926-27.....	1,546	11,613	4,111
1927-28.....	1,952	12,094	4,947
1928-29.....	2,159	12,066	5,572
1929-30.....	2,199	13,614	7,355
1930-31.....	3,005	16,755	8,632
1931-32.....	3,086	18,370	9,743
1932-33.....	3,807	28,550	10,968
1933-34.....	4,499	35,474	12,132
1934-35.....	5,748	45,078	12,487
1935-36.....	6,374	56,661	13,520
1936-37.....	7,010	63,572	14,135

\* These figures were taken from reports of the United States Office of Education and the files of the New York State Education Department.

## *Secondary School Programs and Vocational Adjustment*

nominal rate during the depression, owing largely to very little expansion in the facilities for such types of education.

Vocational agriculture has had two periods of rapid growth. The first was from 1911 to 1918, while the second has been from 1929 to 1936. In the school year 1935-36 there were 6,374 pupils enrolled in all-day classes in 234 high school departments of agriculture. In addition there were 3,320 in part-time classes in these departments.

### *Inequality of Opportunity*

Throughout the State there exists a great inequality of opportunity for secondary school pupils to pursue certain types of vocational education. The most serious situation occurs in the industrial and technical education fields. One principal said, "The only way some boys in the State can get industrial education is to be sent to a reformatory." Table VI shows that the enrollment in 1935-36 in all-day trade and industrial courses was confined to thirteen communities and two state schools of agriculture. These communities, with two exceptions, had a population of at least 60,000 each, and most of them were situated along the main railroad lines. Eighty-seven per cent of the boys and 97 per cent of the girls enrolled in these courses lived either in New York City or in Buffalo. The majority lived in New York City. Outside of New York City there were only 7,969 boys and 1,553 girls enrolled. Ninety-seven communities out of a total of 110 in the State with a population of 5,000 or more do not have facilities for this type of education. These ninety-seven communities have a total population of 3,719,784.

It is extremely difficult, if not impossible, for pupils of one school district to receive this type of education in another school district. Some localities refuse to accept such students, or will not take them as long as there are any local pupils who want to attend. Such a situation means that many rural youths, youths in the smaller communities, and youths living

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in communities adjacent to urban centers, are denied vocational education. New York City was excluded, since it does not permit any nonresident pupils to attend vocational schools, but in vocational schools reporting to the Inquiry only a small percentage of the students enrolled were nonresident. Even within some of the communities that offer vocational education many pupils who seek this type of education are denied the opportunity, largely because the courses have been concerned with training for skilled trades.<sup>18</sup>

TABLE VI  
ENROLLMENTS IN ALL-DAY FEDERALLY AIDED TRADE AND INDUSTRIAL CLASSES,  
BY COMMUNITIES IN NEW YORK STATE, 1935-36

Community	Male	Female	Total
Albany.....	191		191
Buffalo.....	3,763	819	4,582
Delhi State School.....	15		15
Dunkirk.....	164		164
Morrisville State School.....	17		17
Mount Vernon.....	397	288	685
New York City.....	23,943	23,196	47,139
Niagara Falls.....	574	258	832
Poughkeepsie.....	70		70
Rochester.....	1,614	85	1,699
Schenectady.....	245	17	262
Syracuse.....	356	86	442
Troy.....	206		206
Utica.....	51		51
Yonkers.....	306		306
Total.....	31,912	24,749	56,661

Vocational technical education is also found in only a few cities. Out of a total of ten cities offering this type of education in 1935-36, New York City and Buffalo had 89 per cent of the enrollees.

In contrast with industrial and technical education, commercial courses are found to a greater or less degree in almost

<sup>18</sup> See later discussion on admissions and on courses, pages 56-62 and 72-74.

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all communities. In the large urban centers are a few high schools that specialize in academic courses only. With the exception of this group, practically all secondary schools offer courses in commercial work. Business education is also offered in the smaller agricultural communities as well as in the larger cities. Moreover, nonresident pupils are generally accepted.<sup>14</sup>

Of a total of 978 cities and towns in the State, 479 do not offer homemaking or home economics courses in the high schools, and 499 do provide such courses. Two counties in the State had only one home economics teacher, while some others had as many as 118. These programs are not provided in the more sparsely populated and poorer rural sections of the State. However, as most of the towns and communities in which these programs are not offered have a relatively small population, the number denied this opportunity is not so great as the number of places would suggest. If these programs are restricted to certain schools in a city, girls who cannot attend such schools have no opportunity to take these courses. In some schools where such courses are offered preference is given to the girl who majors in homemaking over the girl who wants only one or two courses in homemaking or the less intensive home economics course.

Vocational agriculture courses are available in 234 high school departments of agriculture located in forty-seven of the counties outside of New York City. The fifteen counties where courses were not given are areas where there is little or no agricultural interest, or they are on the margin of such areas. Furthermore, all high school departments generally admit nonresident students. In fact, from two-thirds to three-fourths of the pupils in vocational agriculture courses in fifty-seven schools reporting to the Inquiry were nonresident

<sup>14</sup> Fifty-six out of a total of 69 principals of schools in which commercial courses are offered replied to the Regent's Inquiry that nonresident pupils were permitted to enroll in these courses.

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students. Rural youth is not denied an opportunity to study agriculture, but his other vocational choice is limited largely to commercial work. For all practical purposes he is denied secondary school education in vocational industrial and vocational technical education and to some extent in homemaking and home economics education.

### SPECIALIZED VERSUS NONSPECIALIZED SCHOOLS

Trade and industrial education is found more frequently segregated in separate schools than are the other courses discussed. Technical education, however, shows a strong tendency to develop in independent schools.

In contrast, business or commercial education is offered in almost all types of high schools in the State. There are only a few separate commercial high schools. To a limited extent this work is also offered in vocational schools.

Homemaking and home economics are also offered in various types of schools. In some city schools there is a tendency to provide home economics or homemaking courses, or both, in vocational high schools, and to omit all such courses from high schools of the classical type. In other cities some courses in home economics or homemaking, or both, may be offered in any or all of the high schools. When these programs are restricted to special vocational schools, the pupils taking classical, general, and sometimes commercial programs have no opportunities to elect courses in home economics, although they might profit by them. On the other hand, the pupils who elect a homemaking major in a vocational school may be prevented from taking as broad a range of courses as they desire and should have. Furthermore, if these courses are offered only in the vocational school, home economics teachers cannot cooperate with other high schools in the development of integrated programs to which home economics might well make a contribution.

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Vocational agriculture is offered mainly in the general high schools of small communities. There is no tendency to extend this course to the specialized schools in the State. Only one agriculture course in a vocational school was brought to the attention of the Inquiry staff. This was a course in horticulture. It has been developed in a school which offers building trades courses as a result of the principal's desire to round out his total offerings and because of the support he received from interested groups in the community. The boys enrolled in vocational agriculture in high school departments of agriculture are segregated for instruction in agriculture, but enroll in classes with nonagricultural students for instruction in academic subjects.

As has been mentioned, the tendency to establish separate schools was marked in the technical and the industrial fields. Although there are only four separate vocational technical schools, out of a total of twelve schools offering this type of instruction, these four schools enroll nearly 90 per cent of the technical students in the State. Of the other eight which have departments for vocational technical training, some are vocational industrial schools and some are general high schools. This type of education has been strongly influenced in many respects by the developments in the vocational industrial field. Yet these developments cannot explain all of the changes, since technical education in New York City, for example, is not under the supervision of industrial educators. In one community the director of technical education preferred to be associated with the general high school rather than with the industrial school, the reason being the low repute in which the industrial school was held.

### *Separate Vocational Industrial Schools*

Virtually the entire enrollment in vocational industrial education is found in separately organized vocational schools, with only a small percentage in general high school depart-

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ments. The organization of the curriculum in the industrial high schools of New York City further emphasizes segregation, not only by separate schools but by trades in central vocational schools; for example, printing and textile schools.

The reasons for this practice of setting apart vocational industrial work are partly historical and are partly due to the nature of the program. In the early days of the development of vocational education there was considerable opposition to such courses being introduced into the secondary schools. In some places the opposition still exists. One vocational educator said, "There is still a long way to go before a majority of academic teachers will not tell their pupils that the vocational school is the place where all bad little boys and girls go after they die—educationally." The vocational educators feel that they have been forced to house their school programs apart from nonvocational courses and to operate them under separate control and administration in order that the integrity of their offerings might be maintained.

Another reason for the separate vocational industrial activity is the need for shop conditions that more nearly approximate those of industry than are found in the traditional high school. This reason, however, is probably not so valid as the first, for some communities in New York and other states seem to have developed comprehensive high school organizations which include well-developed vocational industrial classes. The provisions of the Smith-Hughes Act have fostered such separation. The school day of six clock hours, required by that law, as compared with the shorter day of the average secondary school organization, is an illustration in point.

Certain favorable and certain adverse effects result from separating vocational students and teachers from the rest of the secondary school population. Where independent schools are maintained, a number of desirable features and outcomes are claimed, among which are the following:

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1. Mutual vocational interests tend to develop among the students a camaraderie essential to pride in craftsmanship.

2. Support for the school is more easily obtained from organized groups of employers and employees.

3. Modern methods, processes and equipment demanded by industry are more practicable. Duplication of expensive equipment is obviated.

4. Employment for students is more easily obtained.

5. Comparison of the teaching methods of similar subjects, as well as close cooperation, is made possible.

6. Because of separate administrative control, the curriculum is more apt to be in keeping with industrial demands. Greater teaching efficiency through closer supervision is attained.

Though it was born of necessity to survive, the separate vocational school is now well established in New York State, and in many communities has grown through strong leadership to a place of prominence and respectability.

Certain disadvantages may arise from having separate vocational schools. Some of these are:

1. Inconvenience to children who have to travel long distances, especially when transportation facilities are not available or not provided.

2. A mutual disregard for the offerings and activities of the other school. Aloofness or even hostility may develop between teachers and pupils when vocational and nonvocational work is offered in separate schools. Such attitudes were evident in certain communities visited.

3. Tendency to set standards of admission higher than demands of industry justify. Employers usually try to use the best qualified employee possible, regardless of the turnover which overselection may cause.

4. Tendency to train students at public expense beyond the elementary stages justified and to relieve industry of its obligation for organized training on the job. In the case of

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some printing courses previously referred to, the graduates could not receive any credit toward their apprenticeship even though the school work in printing was of a superior standard.

The fundamental disadvantage arising from separating the vocational work, and the only one on which sufficient evidence was obtained to make an authoritative statement, is the mutual disesteem in which each school group holds the other.

A school system divided against itself is not likely to reach the educational level of one in which objectives, procedures, and outcomes of the whole system are discussed in an atmosphere of friendly professional cooperation. Separation solidifies differences. In attempting to outwit the other, each group makes the innocent pupil the recipient of its venom.

### *Business Education in the General High Schools and in the Separate Vocational Schools*

At the present time there exists little articulation between business education courses in the general high schools and in the vocational schools. In fact, there appears to be evidence of competition in the offerings of these two types of schools. Representatives of both types of schools claim to be doing a superior job. The vocational school maintains that it is giving a specialized intensive training on a genuine vocational basis with business standards, while the business educator in the general high school believes he is giving an "all-round" training with a good academic background. Among the schools studied, no examples of the two types working together on a cooperative basis were found.

## ADMISSION

Among the vocational trade and industrial, vocational technical, vocational agricultural, commercial, and home economics and homemaking groups, it may be said that the

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first two have gone further in the development of an admissions policy than any of the others, but even they, on the whole, fall short of any adequate policy.

Eighth grade graduation or enrollment in the grade in which a course is offered are the usual requirements. It is assumed that the pupil is interested in the course or he would not apply for admission. In only a few schools, as will be seen, are any tests used as criteria for selecting students for specific courses.

The absence of what might be called an admissions policy was evident in business education. In general, either there were no requirements, or else eighth grade graduation, or its equivalent, was the requirement.

No definite standards are set up for admission to the advanced homemaking or home economics courses. Pupils who have reached the grade in which a course is offered are generally admitted, if they wish to take the course. One of the shortcomings of the program is that these courses are usually open only to girls. As yet not enough of these classes are offered to boys. However, in recent years some homemaking and home economics educators have been giving more consideration to boys' interests in this type of work.

If double periods continue to be required in all courses in homemaking, in some schools it will be impossible for pupils who do not wish to give so much time to the subject, to have any home economics education. In schools where all students who desire to take homemaking cannot be accommodated, preference is usually given to those who desire to major in the subject. In these schools preference is almost always given to those wishing to take the homemaking courses rather than to those wishing to take home economics if a choice has to be made between pupils. It frequently results that the rejected students are not permitted to take home economics courses, while those majoring in the subjects are required to take several, each of which covers two periods.

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It is frequently assumed that the girls who elect homemaking will become homemakers and that the others will probably do something else. In the face of evidence from various sources, that most of these nonhomemaking students will marry, this position seems hardly tenable.

Graduation from the eighth grade, possession of facilities necessary for supervised farm practice work, and an interest in farm training are the standard requirements of high school departments of agriculture. Sometimes pupils who do not have all of these qualifications are admitted. Frequently village boys who have inadequate facilities for supervised farm practice work are admitted.

Generally speaking, entrance to trade and to industrial high schools is based on eighth grade graduation. A number of school systems, including some in New York City, have instituted a ninth year tryout period in the vocational schools. A few of the smaller city vocational schools admit pupils in the seventh and eighth grades and provide a rotation of shop experience in these years.

With one or two exceptions, technical high schools also admit students at the end of the eighth year.

### *Use of Tests*

Very few schools utilize tests or special examinations as means of determining the capacity of individuals for specific courses.

No special examinations or tests are given pupils who apply for admission to vocational agriculture courses. This fact was brought out clearly in the responses of principals of secondary schools with departments of agriculture.

Very few trade or industrial schools require written tests for entrance into trade classes. In schools where a limited number can be accommodated, the candidate's previous school record and physical fitness are considered. English and arithmetic tests are sometimes given.

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In one industrial high school visited by a member of the Inquiry staff intelligence and clerical aptitude tests were in use. In this school the tests were given in the junior high school; those who do not make a sufficiently high score were retained in the junior and senior high school and special occupational classes were provided for them. No attempt was made by the vocational school officials in this community to provide for students of semiskilled occupational abilities.

In another vocational school, pupils upon entrance or soon after admission were given intelligence, reading achievement and arithmetic achievement tests. Individual tests were given to those pupils whose scores were high or low. The school uses such tests as the following: Pintner-Paterson performance scale, Stanford Revision of the Binet-Simon, diagnostic tests to determine the cause for reading disabilities, and various mechanical aptitude and ability tests. Generally, however, no such battery of tests is given to pupils applying for admission to industrial courses.

The selection procedure in one school system was studied in detail. In this system, during the spring of each year a Vocational Guidance and Secondary School Information Campaign is conducted in all elementary schools. This campaign consists of distributing leaflets to the pupils and to eighth grade teachers, which describe the work in the various high schools; ten lessons in the eighth grade on the high school offerings; visits to vocational schools; mass meetings in academic high schools; making out of "declaration of intention" cards by the pupils; and Saturday morning "interviews" of all prospective entrants the first and second Saturdays in June (with some students in line at five o'clock in the morning).

At these Saturday morning interviews qualified students are registered. The registration procedure was investigated in some detail. In the main it may be said that there is apparently much room for improvement in the method of matching

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human abilities with occupational demands. Especially is there greater need for the use of objective measurements, not only in this school system but also in many others.

### *Extent of Rejections*

With the exception of the industrial and vocational technical fields, schools do not, as a rule, reject applicants for vocational courses. For example, 60 out of 88 principals of schools in which commercial courses are taught reported that it has not been the practice to reject any pupils who have applied for admission to business courses. In fact, two principals reported that they were not permitted to reject applicants. Less than 20 per cent of the principals of schools with departments of agriculture reported that it has recently been necessary to reject pupils who have applied for admission to courses in agriculture.

In contrast to the situations mentioned above, vocational industrial and technical school principals frequently reported rejections. The reasons given were: lack of facilities (one school reported that there were two or three applicants for every vacancy); lack of preparation, especially in the technical schools and departments; and physically handicapped and retarded pupils. In certain courses, schools reported that it was necessary to limit the enrollment, and hence probably reject some applicants, because of limited employment opportunities in the occupation.

It was evident that in New York State, exclusive of New York City, there was a tendency for vocational industrial and technical educators to imitate the practice of many classical educators by rejecting all but the most capable. Many vocational educators believe that they should restrict their endeavors largely to training for the skilled trades, ignoring the vast field of semiskilled trades. Only a few communities seriously attempt to offer training of the latter type.

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Throughout the State there was evidence that many more students would have applied to trade and industrial schools if they had not been discouraged from doing so. Uninformed or prejudiced parents, elementary and high school teachers, and counselors undoubtedly prevent many pupils unfitted for academic pursuits from applying for entrance to vocational trade and industrial schools. What do those whom the schools reject for specific vocational courses do? In some cases the individual is advised to enter another course in the same school or, more generally, to enter another kind of vocational school, or a general high school, in the same city. The most serious results of these rejections are that many of these students drift into high school curricula unsuited to their abilities and needs, while others simply drop out of school altogether.

### *Results of Admission Policies*

As a result of the admission policies, or rather, lack of policies, among some groups, the contention is frequently made that many students cannot profit by the type of instruction they are pursuing. This was intimated earlier in the discussion of objectives.

As we have seen with regard to commercial courses, nearly any pupil may be admitted, as a result of the absence of an admission policy. Teachers in some New York schools estimate that as high as 50 per cent of the students in these courses are innately unfitted for the work. The usual statement was that about a fourth of the commercial students cannot advantageously take this work, regardless of how thorough the technical training may be. Approximately 75 per cent of the schools reporting to the Inquiry stated that recently it has been necessary to enroll in business courses pupils who are not suitably qualified for such training. The four most important reasons given were: (1) only two courses were open for choice

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—academic or commercial, (2) vocational courses were not available, (3) right of choice was not limited, and (4) pupils of low intelligence elect business.

The policies followed in homemaking and home economics result in many girls, who do not wish to devote the double time required to homemaking, being deprived of an opportunity of studying home economics.

Some pupils enrolled in vocational agriculture are not suited for training in farming. Principals reported that some village boys were admitted who did not have a genuine interest in or adequate facilities for supervised farm practice work.

There was a tendency in some vocational and technical schools to overselect. Popularity of certain courses, attractive buildings and favorable publicity drew to the school a type of student who was better suited to some other course. On the other hand, the prestige of some vocational schools was probably so low that many pupils who should have been attending their courses were not attracted to them. The facilities in one community were so poor that it was surprising any pupil should have chosen to study there.

### POLICY IN REGARD TO TRANSFER STUDENTS

Transfer students seem to be accepted without serious difficulty in home economics and homemaking courses. When, however, because of overcrowded conditions or for some other reason, a choice has to be made, pupils from the school and school district are given preference. Neither does there seem to be any difficulty concerning transfer students in vocational agriculture nor in business education.

In vocational industrial courses, however, apparently there is little transferring from school to school after the ninth year because of the special nature of the courses. In cities where there is more than one type of vocational school, a few students may occasionally be transferred. Several principals mentioned transfers from other secondary schools to their

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vocational schools. Transfer within vocational industrial schools from course to course is more difficult than would seem to be desirable, except in those vocational schools where the ninth grade tryout system is in operation, for example, in New York City. Here transfers are encouraged in order that the student shall find the course that best suits his abilities and interests.

## CHAPTER IV

# Secondary School Programs and Vocational Adjustment—Cont'd

### CHARACTERISTICS OF THE PUPILS

OBJECTIVE tests, similar to those given in June, 1936, to approximately 23,000 general high school students, were given to 2,426 students in vocational and technical schools in May, 1937.<sup>1</sup>

How did these vocational and technical pupils rank? Those in vocational schools, except the two technical schools, ranked lower on the achievement tests than the general high school pupils of the same grade status. In general science the achievement of the pupils of the technical schools tended to be high. Vocational school pupils were chronologically older than the general high school pupils of the same grade. Except in the case of the technical students, the vocational groups ranked lower than the general high school groups in scholastic ability. According to the data for the groups, vocational pupils, with

<sup>1</sup> For the character of these tests and for other details, see Ruth E. Eckert and T. O. Marshall, *op. cit.* Briefly, the tests were in the following fields: Otis quick scoring, reading, arithmetic fundamentals, arithmetic problems, literature, American history, civics, acquaintance with public affairs, aesthetic interests, health awareness, general science, civic beliefs, and adjustment questionnaire. No achievement tests were given on shop subjects. The Inquiry Staff attempted to confine its investigation to those objectives which might be considered as common to the curricula of general and vocational schools. It was believed that the areas selected for analysis were in fields which are basic to the social competence of an individual in meeting his social and vocational requirements and developing his responsibilities as a citizen.

There were some vocational industrial pupils included in the June, 1936, testing program.

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the exception of the technical students, were inferior to the general high school pupils in basic reading and arithmetic skills. Boys were generally superior to girls on all tests except the adjustment questionnaire.

It was possible to compare the achievements of academic high school pupils and vocational high school students in three cities. On the whole, the vocational pupils tested were consistently inferior to the general high school pupils.

On the basis of curriculum majors of the vocational and technical pupils tested in May, 1937, the differences may be classified as follows: pupils in the college preparatory and vocational technical courses ranked highest; art students also achieved relatively high scores; pupils in vocational homemaking courses ranked lowest,<sup>2</sup> the industrial students ranked slightly better than the vocational homemaking students; and the commercial students tended to be nearer the average of the entire group.

It may be well to examine briefly differences among the various curriculum groups represented by the 23,000 general high school pupils tested in June, 1936. Those ranking highest—in terms of attitude on social issues as well as of the more academic measures—were the graduates of the college entrance curriculum. Graduates of the general curriculum ranked consistently higher than those of the business curriculum. Business curriculum graduates in the general high schools ranked above those in the other vocational classifications. The least able pupils scholastically in the general high schools were those graduating from the homemaking, agriculture, and industrial curricula. Of the latter, girls in the homemaking curriculum were the most seriously handicapped.

Wherever comparisons were made, the differences in the status of vocational students in the general high schools were in general similar to those shown in the status of the students in

<sup>2</sup> A study of school offerings showed that the scholastically least able girls tended to take the homemaking course.

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vocational schools, according to the May, 1937, testing program.

### *Reasons for Taking the Various Courses*

Students usually elect the commercial course because they are interested in it, or because it is the only course in practical education that the school offers, or because paternal pressure or the desire to get into a white-collar occupation sends them into it.

Although the reasons given for selecting homemaking and home economics courses were often superficial, there were many who elected these courses because they considered them a valuable preparation for home activities and home life. Apparently many high school girls were attracted to home economics courses because they considered home economics a help in obtaining employment. Commercial students frequently selected certain home economics courses because they believed the courses would aid them in improving their manners and personal appearance. Evidently these pupils recognized that many of the standards which are taught in home economics courses—cleanliness, orderliness, courtesy, and suitable appearance—are exceedingly valuable qualifications for the girl seeking employment.

Various reasons were given for selecting industrial courses; some were sound and others were not. One principal said that if a choice of courses was left to the student probably only two or three courses would be given—aeroplane and auto mechanics.

### *Pupils' Attitude toward Their School Work*

Although their scores on achievement tests were lower, the vocational school pupils tested in May, 1937, tended to have higher adjustment scores than the general high school pupils tested in June, 1936. This tendency was most marked and consistent in the question concerning attitudes toward teach-

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ers. Among the general high school pupils, it was found that the higher ranking students had consistently a more critical attitude toward the school and its offering.<sup>3</sup> This critical attitude toward teachers and the school was also found among those ranking highest in the technical school group in terms of test achievement. Was the adjustment among such pupils poor or was there a tendency among the students ranking highest to be more critical of their teachers and their school? Among the less able students, was their adjustment good or were the students less able to develop a critical attitude?

### *Pupils Who Leave before Completing Course*

The study made of over 30,000 pupils who left general high school between June 1 and September 30, 1936, showed a pronounced economic selection persisting in New York State secondary schools. Over half of the pupils leaving before graduation were reported as coming from "poor" or "indigent" homes, contrasted with fewer than a fifth of the graduates coming from such homes. The economically favored graduates were found in the college entrance curriculum; those most limited financially were in the vocational curriculum.

The occupations of parents showed a distribution similar to that established for economic status. Highest persistence and enrollment in the academically most respectable curricula occurred among children from professional families; lowest persistence and enrollment in the vocational curricula were characteristic of pupils whose parents were engaged in unskilled labor. Manufacturing, trade, and agriculture represented intermediate categories.

The number of pupils who dropped out of school was largest for pupils enrolled in vocational curricula and smallest for those in the college entrance curriculum. Girls tended to predominate among those who dropped out of the business curricula. The average academic record of all pupils leaving

<sup>3</sup> This attitude did not extend to home and community relationships.

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before graduation was consistently poorer than those who continued until graduation. The latter tendency was also true for students in separate vocational schools.

In certain industrial courses in vocational schools, it is difficult to hold all of the pupils until the course is completed. In a school that has a reputation for good students, during the twelfth year when employment opportunities are open, it is difficult to hold the student till graduation. Many students drop out of school as soon as they reach the end of the compulsory school attendance age. This was true of students of a certain racial extraction in one school visited, where many students left at the end of the second year. In other schools, there were high dropout rates not explainable entirely by the reasons mentioned above. Perhaps some schools attempt to overtrain their pupils, and merely discourage them, so that they leave with only a partial training. This may be true in certain technical courses.

### NATURE OF THE COURSE OFFERINGS

#### *Types of Courses*

If one examines the total list of vocational and quasi-vocational courses in all fields, New York secondary schools appear to offer many different types of courses, but closer examination of the nature of the offerings in the different fields discloses certain gaps and omissions.

*Commercial.* As has been indicated earlier, business education conforms to a common pattern, emphasizing chiefly specialization in stenographic, bookkeeping, general clerical, and general business courses. The schools offering business education tend to offer one or more of these four standard programs, as outlined by the State Education Department. In a few of the larger schools there is some tendency to expand the program to include specialization in retail selling, clerical practice, and office machines. In New York State the reasons for main-

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taining these program patterns are mainly historical; and the curriculum offerings conform in general to the usual pattern found throughout the country.

The offerings do not make adequate provisions for boys, nor do they provide for students who cannot fulfill the specific demands of bookkeeping and stenography. Furthermore, they do not provide much vocational training for the great group of dropouts.

*Homemaking and Home Economics.* Both homemaking and home economics programs are offered in New York State, the homemaking course being intensive in character, while the home economics course is less intensive. Homemaking requires ten periods a week, or a double period daily, with outside preparation, and also definitely planned and supervised home projects. Home economics requires only one period daily, with outside preparation but without home projects.<sup>4</sup>

In connection with these two courses there are three questions which need consideration: Is it desirable to offer two distinct courses, one presumably vocational and the other

<sup>4</sup> The four courses in homemaking which are approved by the State Education Department are: Homemaking A, elementary foods and clothing; Homemaking B, house planning, house furnishing, and house care; Homemaking C, advanced foods and clothing (allowed as elective credit only); Homemaking D, home management, house nursing, child study, and family life. To receive a vocational homemaking diploma, a pupil must meet certain educational requirements, including 6 units in homemaking (A, B, and D) in grades 10, 11, and 12.

The approved home economics courses are: Home Economics, ninth year; Home Economics 1, general home economics; Home Economics 2, elementary foods; Home Economics 3, advanced foods; Home Economics 4, elementary clothing; Home Economics 5, advanced clothing; Home Economics 6, house planning, house furnishing, and house care. Each course counts as only one unit of credit. Home Economics 3 and 5 are allowed as elective credit only and are not allowed toward a major or minor sequence in home economics. To earn a nonvocational diploma the pupil, in addition to certain other educational requirements, must take a major sequence of three one-unit courses in home economics.

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nonvocational? How much emphasis should be placed on home projects in the homemaking course? How shall the deficiencies in the program be taken care of?

From an educational point of view, the justification of the two distinct courses may be seriously questioned. If taught correctly, should not both courses contribute to both vocational and general education, thereby fitting the pupil for better home and family life? In 1930 there were, according to the United States Census, 3,005,630 women in New York State fifteen years of age or over who were classified as homemakers. Only 1,865,511 men and women, fifteen years or over, were classified as gainfully employed in manufacturing and mechanical pursuits in the State according to the 1930 Census of Occupations. Care of the home is, therefore, an important field of activity.

Certain difficulties arise from taking the homemaking course. The use of the double period makes it difficult to meet the entrance requirements of most colleges without taking extra credits, and even if a pupil were willing to do this, the double period often produces conflicts in schedules. Several teachers who were interviewed questioned the desirability of using the double period. Such an arrangement does not encourage flexibility in the school program. Some students dally at their work when the period is doubled. The double period seems to prevent a greater number of pupils from taking the course than would seem justifiable.

The use of the home project device is a distinct phase of the homemaking course. It is justified as an aid in keeping the courses in line with home needs, and in giving the pupil more extensive and independent practice than would otherwise be possible. But if this is a valuable device for teaching, why has it been restricted to the homemaking course?

But, is it overdoing a good thing to require so many projects of each homemaking pupil? During the school year 1935-36 there were 3,926 home projects involving the provi-

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sion of food for the family; the same number in selection, care, and construction of clothing; 1,749 in the improvement, arrangement, care, furnishing, and equipment of the home; and a similar number in care and guidance of children, health and home care of the sick, home management, consumer buying, or family and social relations. May not the teacher of homemaking become so absorbed in such a great number of small projects that the more comprehensive problems of the home and home life will be forgotten? To be well done, home projects require considerable supervision, which is not always possible if teachers have heavy teaching schedules.

What are the gaps in the program of home economics and homemaking? For one thing, very little desirable training for commercial food services, such as the training of cooks, cafeteria counter workers, waitresses, and hostesses is being given. Very few courses have been developed which will help girls to engage in remunerative employment. In one school system, the home economics teachers have sometimes helped waitresses, or those who hoped to find this type of employment, during the activity hour. These were, in effect, unit courses which trained in this service and related activities. The girls who would have objected to registering in a regular course planned to train for employment in this line, seemed to appreciate the help offered in this way.

Another aspect of home economics education which has already received some attention but which should be given even more emphasis is home economics work for boys. In 1935-36, 114 communities offered approved courses in home economics for boys, and had an enrollment in these courses of 3,043. Many principals of schools in which home economics was taught reported to the Inquiry that there was a definite need for courses for boys, and in some instances the boys themselves were asking for courses in home economics.

From visits made to schools by a member of the Inquiry staff, it was evident that some teachers had given little thought

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to boys' classes, while other teachers were awake to the possibility and heartily favored them or mixed classes. Certain boys in one of the schools visited became interested in the home economics exhibits which were displayed in the school corridors. When they asked if they might take the work, the principal replied he could not provide such a course for only two or three boys. A week or so later, a group of boys brought him a petition for a course signed by forty-eight boys. They were promised a class beginning the following fall. This is only one of several instances in which boys have shown an interest in the work.

*Vocational Agriculture.* Four courses are offered in vocational agriculture; Agriculture I, II, III, and IV.<sup>5</sup> The content of these courses is based on the major and minor farm enterprises in the school patronage area. The time allotment of enterprises in four-year courses, in nine high school departments of vocational agriculture examined by the Inquiry staff, showed that the relative emphasis given to various enterprises was strikingly uniform.

Supervised farm practice is an integral part of agricultural education. However, it is difficult for a large number of village boys to comply satisfactorily with this requirement.

*Vocational Industrial and Technical.* New York City and Buffalo, the two main centers of vocational industrial education, offer a wide variety of courses. In New York City, 68 offerings were being given in April, 1937; 42 of these courses were for boys, 18 for girls, and 8 vocational commercial courses for boys and girls. Courses most widely offered for boys are auto mechanics, electrical installation, printing, and machine shop. For girls the courses most frequently offered are personal hygiene

<sup>5</sup> A comprehensive examination is given at the end of the four years' work. Part I is a Regents' Examination, while Part II, dealing with principles and practices of production and management and their application to local farm conditions, is prepared locally.

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(beauty culture) and dress manufacturing. The general commercial course predominates among the vocational commercial courses.

New York City vocational industrial schools are of two types, general and central. The general schools are neighborhood schools which cater to the general vocational needs of the community and in some cases offer special courses. There are sixteen of these schools in the City. The central schools, for example, the Manhattan High School of Aviation Trades and the New York School of Printing, offer special types of courses. There are seven central or specialized schools in the City. These schools on the whole offer fewer courses than the general schools. There are also three technical high schools in New York City, one of which is devoted to the textile industry. The Brooklyn Technical High School has an enrollment of over 6,000 pupils.

Buffalo vocational schools offer twenty-five separate curricula. With one exception, there is no overlapping of trades and courses in the various schools. Each school has individual responsibility for certain vocations, for example, aviation mechanics and baking. In addition, some of the schools specialize in skills of a certain level. Out of a total of seven, six are boys' schools and one is a girls' school. Of the six boys' schools, one is devoted to technical education, four are devoted to education for the skilled trades, and one is devoted to education for semiskilled occupations. Great care is exercised to maintain clear lines of demarcation between the technical, skilled, and semiskilled levels.

In other cities of New York State offering vocational industrial courses, the spread is not so broad. Rochester offers nineteen curricula, Yonkers and Mt. Vernon each offer ten, and other schools reporting to the Inquiry gave from one to six curricula, with four and five offered most frequently. Excluding New York City and Buffalo, most communities tend to

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specialize in a few courses, of which the most frequently reported were electricity, machine shop, woodwork, and auto mechanics.

The curricula in New York State deals mainly with the skilled trades and emphasizes training for specific occupations. Training for semiskilled occupations has not been seriously considered by many vocational educators in the State. The State Education Department has issued a bulletin on the General Industrial School. As yet, however, there is only one school in the State training exclusively for the semiskilled trades. In only a few localities were vocational educators seriously interested in or attempting to meet the need for educating for semiskilled occupations. In some communities a desire was evident to become exclusive and to restrict the enrollments to a selected group interested in the skilled trades, rejecting all others.

Unit technical courses are offered in architecture, electricity, industrial chemistry, structural design, mechanical design, and power generation. An engineering college preparatory course is also available. The Textile High School in New York City offers technical courses in various phases of the textile industry. The distinctive feature of all of these courses is the unified vocational technical instruction. Each pupil is required to specialize in some subject matter field and must complete in that field at least five units out of the sixteen required for graduation.

Two dangers to the development of vocational technical education seem impending. First, unless careful steps are taken in some communities the development of technical education may prevent the expansion of a comprehensive vocational and technical program. Vocational education should not become the neglected phase of secondary education, as it has in at least one community. The other danger, as has been indicated earlier, is a tendency in some places to over-select and overtrain.

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### *Responsibility for the Courses Offered*

School officials seem to be almost solely responsible for the introduction and modification of courses, as observed in this survey, although other individuals or advisory groups, as well as the State Education Department, are sometimes consulted.

In home economics, for example, the principal and the teacher determine the offering, with the decision frequently subject to the approval of the superintendent or board of education. In a few cases the home economics advisory board made recommendations to the principal and teachers. The teachers look upon the work of the Bureau of Home Economics Education as of great aid, and its recommendations carry weight. There was no indication that any of the teachers consider that the Bureau dictates to them. The teacher, while drawing heavily on the suggestions for courses as prepared by the State Department, is primarily responsible for the final decision concerning the details of the course.

The local teacher in the vocational agricultural course determines the course contents, with the approval of the principal of the high school. The teachers receive assistance on this problem from the advisory boards of farmers, committees of farmers, and, of course, the Bureau of Agricultural Education of the State Education Department.

In business education, principals and boards of education, for the most part, determine the course offerings. In addition to school administrators and boards of education, teachers also serve as chief agents in the modification of courses. The advice of the State Education Department is sometimes sought. Businessmen and labor groups are consulted rather infrequently. In fact, cooperation with labor groups is looked upon with doubt and surprise. If there is any cooperation at all it is usually on an informal basis and for the most part rather unsystematic. The Inquiry staff found only one school that consults an advisory committee of business men concerning

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the content and nature of the business offerings. Such a relationship is unusual. Recently cooperation has been encouraged in the retail selling field, because of the enactment of the federal George-Deen Act. Specific content of courses is drawn largely from textbooks, and the New York State syllabi are followed rather closely. It appears that the state syllabi standardizes courses to a considerable extent, particularly those in which Regents' Examinations are given.

In industrial and technical education, as in other fields, school officials seem to be almost solely responsible for the introduction or modification of courses. Principals of these schools reported that certain agencies were sometimes consulted: namely, advisory boards, labor organizations, specific trade committees, employers' groups and trade associations, United States Employment Service, alumni, and social service organizations.

In one city a committee from the Industrial Managers Council of the Chamber of Commerce has been most helpful, especially on equipment problems. In another city the Chemical Education Committee has been effective in establishing and revising curricula, and in placing graduates of the chemical technical course. In one community several non-professional agencies knew more about the local vocational school than did certain elementary school principals, who were unaware that the local vocational school had a technical department.

### *Problem of Migration*

Migration from city to city, from urban to rural areas, and from rural to urban, goes on all the time. What provisions do local school systems make to meet this situation? Generally, vocational industrial education curricula have been based on local industries and local employment demands, since these conditions are at hand, and migration movements are difficult to predict.

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A serious situation exists in agricultural communities where virtually no vocational industrial, or technical education is offered. Undoubtedly many boys will migrate to nonagricultural areas. Except for agricultural or commercial training and to some extent home economics or homemaking, rural youth is denied vocational industrial and technical education. In the state schools of agriculture some industrial work has been established, which perhaps represents the beginning of an attempt to equip young men and women in these areas for industrial work. The failure to provide facilities for industrial training in most rural communities raises the question of how to provide desirable means whereby localities can offer appropriate courses in these fields.

The commercial training offered in rural areas is an imitation of the work provided in large centers and therefore has the same defects plus the additional handicap in some schools of inadequate equipment.

### *Elimination and Modification of Courses*

Certain schools have discontinued vocational work of one kind or another, mainly, however, in the industrial field. Modification of courses and of course content was evident in varying degrees in all fields, but especially in the industrial field.

The elimination of some programs was noted in industrial education. Between 1918 and 1926, six school districts discontinued their federally aided vocational industrial programs. In 1935 two other communities terminated federally aided programs.

Particular courses in the industrial field are frequently discontinued. For example, since 1931 a few of those reported dropped were: the general course in one technical high school, and pattern making, woodworking, bookbinding, retail selling, and masonry in vocational industrial schools. The most frequent explanation for this action was "no placements."

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Modification of course contents is generally accepted as necessary by vocational industrial educators, and systematic revision of courses was frequently reported to members of the Inquiry staff. One or two principals informed the Inquiry that they "were always making modifications in courses." In response to the question, "What courses now offered should in your judgment be modified?" about half of the principals named courses. This does not mean that the remainder have not made any modifications or would not in the future. Some of the suggested revisions were that plumbing should include welding, auto mechanics should include auto radio work, and electric wiring should add electrical installation and service work. Modifications had recently been made in automobile, aviation, electrical, food service, chemistry, and drafting courses. Sensitivity to changes that seem to be part of permanent trends is essential in industrial courses.

During recent years the home economics and homemaking programs have placed greater emphasis on human and social needs and less emphasis on the mechanics of housework. Unit courses in child care, family relationships, family economics, and consumer buying, have been introduced and strengthened. Courses in home management have been revised by placing more emphasis on the welfare and development of individuals living at home. The trend in these courses, as influenced by the Bureau of Home Economics Education, has been toward constant improvement. The effort to maintain the two distinct programs seems the most questionable feature in the program fostered by the Bureau.

The more alert teachers in home economics and homemaking use check lists or similar devices to determine the interests, activities, abilities, and needs of students. The information gained from visits to the homes and from social contacts with families also serves to guide the teacher in building her courses. Teachers are apparently free to make such adjustments between recitation, laboratory work, other

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activities, and preparation, as seems best to meet the needs of a given course.

Some schools have found it advisable to drop the homemaking course because bright girls have passed up the course and caused it to lose favor with many pupils. In other cases, however, the homemaking course has been added because it was felt that there were girls in the school who would profit by the additional work.

The courses in vocational agriculture, based as they are on local farming conditions, are subject to change in accordance with agricultural trends.

The last few years of economic upheaval have witnessed little change in the organization of business courses. Most of the schools have not made any major change in the curricula since 1931. Since then, the curricula in general business and in bookkeeping have generally been the major additions to course offerings. Also, certain subjects within courses have been dropped: Typewriting 2 has been eliminated by some schools, while Business English has been dropped in most schools because of the change in state requirement for a Regents' commercial diploma. However, so far as change and modification of the curricula within the state in the last five years is concerned, it is fair to describe the business curriculum in the State of New York as being reasonably static. In response to a questionnaire and also as a result of interviews, school administrators in general indicated very little awareness of the necessity of change in the field of business education.

### *Community Assistance*

Certain community groups cooperate in the development of courses. The cooperation is sometimes systematic, and in other cases unsystematic. In the vocational field the advisory board or committee is required wherever vocational courses are offered. Since commercial courses do not come under the pro-

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visions of the law dealing with vocational education, advisory boards are not required in business education.

Most communities with vocational industrial schools have advisory boards. Where advisory boards were active, the vocational industrial school appeared to be functioning in a desirable manner. New York City has a very active board with subcommittees on some trades organized under the board to assist the general board and certain schools.

In some communities the boards appeared to be dormant and ineffective. In at least one community, contrary to the provisions of the Education Law, no board existed.

Of all the devices used for making contacts with industry, the Inquiry was impressed most with the possibilities of the advisory board. It has its weaknesses, as have all human institutions, but by and large it serves its purpose well. One of the best examples of the strength of such a board was demonstrated in the work of an apprenticeship advisory committee which was organized to assist a school. This particular committee has increased the efficiency and prestige of the school considerably.

### *Organization of the Programs*

The typical time requirement for industrial education is 50 per cent of a six-hour day devoted to shop work, 25 per cent given to related subjects, and 25 per cent given to academic or general subjects. This distribution applies to each year's work. The related subjects are usually science, mathematics, drafting, or design. The tendency in technical education also is to conform to this practice. For example, if the major subject is chemistry, it is coordinated with shop and 50 per cent of the student's time is devoted to shop. Industrial principals sometimes expressed a desire to modify the proportionate distribution of time between the shop, related subjects, and general subjects, but to do so might result in the loss of federal aid. For example, one industrial high school would like to

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devote more time to health education and would use part of the time devoted to shopwork in teaching health, but because of the federal rules, it is unable to do so. Another school believes that the related technical knowledge for semiskilled trades should be taught in the shop as needed, and that some of the club activities should be offered as part of the curriculum, rather than as extracurricular<sup>6</sup> work.

One instructor in a vocational school writes:

The time, within the limits available for all, which should be devoted to any one of the related technical subjects in a trade curriculum, depends upon the requirements of that particular trade. Baking, for example, requires that considerable time be devoted to related technical science. On the other hand, carpentry requires considerably less related technical science but more related technical drawing and related technical mathematics.<sup>7</sup>

As a matter of fact, a careful calculation of the present distribution of time in several courses would show that federal regulations are not rigidly adhered to. This situation is the result of the fact that administrators in attempting to give the pupil the most appropriate education were forced by the sheer weight of evidence to make modifications in the distribution of time between shopwork, related subjects, and general subjects.

Vocational agriculture, as we have seen, generally requires five periods a week in Agriculture the first year, and ten periods a week during the other years.

Each of the homemaking courses is offered on a double-period basis, totaling ten periods a week, with required home projects, while home economics is organized on the basis of one period a day, or a total of five periods a week.

In the commercial field, the distribution of time between the distinctly vocational subjects and the general subjects varies from year to year. During the first two years most of the work is

<sup>6</sup> See *New York State Vocational News Bulletin*, June, 1937, p. 4.

<sup>7</sup> Martin H. Kuehn, "A General Overview Together with an Outline for Effective Teaching Procedure." *Vocational Education*, Buffalo, 1937.

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of a general character, whereas during the last two years more than half of the time is devoted to business subjects.

Practically all vocational business subjects in the secondary schools are offered in the eleventh and twelfth years. Two courses, Introduction to Business and Business Arithmetic, are taught in the main from a quasi-vocational point of view, or from what might be termed a clerical point of view. These two courses are the object of considerable doubt and criticism among both school administrators and business teachers. The purposes of the course, Introduction to Business, are not entirely clarified. It is an elementary course in clerical practice in some communities, and a tryout course in business clerical pursuits in others. Occasionally it is used to help to orient the student in business relationships, but this purpose is rather unusual. Many criticisms are directed at the course in Business Arithmetic, which, it is held, contains much uninteresting, unnecessary, and unrelated material. The reason for this common criticism may well be the fact that the Regents' Examination mortality in the case of Business Arithmetic is unusually high. The large amount of time devoted to shorthand in the junior and senior year appears to absorb too much time from the students' general education and probably reduces the effectiveness of the students' general training.

### EXTRACURRICULAR ACTIVITIES

The extracurricular programs in vocational industrial schools are on the whole inferior. Facilities for recreation are on a level much below that desired by the principals of vocational schools; in some cases they are unbelievably meager. The sole recreational facility in one school visited, for example, was an outdoor court about 15 by 25 feet hedged in on all sides by brick walls.

Fortunately, many of the values claimed for the group activities of an extracurricular program are achieved through the informal organization of the shopwork. Learning to work

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together, helping each other when help is needed, planning and executing group projects, provide a good substitute for the socializing function of certain extracurricular activities. It is stimulating to observe the methods that boys working on a group project will use in censuring a lazy or careless worker. Carelessness and dishonesty in workmanship are so obvious when the outcome is a tangible product that a premium is placed on desirable conduct. Shop and laboratory organization, with its leaders and coworkers, gives boys and girls as fine a chance to develop leadership as many extraschool clubs and organizations.

Nevertheless, it is questionable whether vocational students should be denied the same facilities for their extracurricular activities that are supplied those in other high schools.

### GUIDANCE

The students in the agriculture, home economics, home-making, or commercial courses in general high schools obviously share whatever guidance facilities are available to other pupils in such schools. It is not possible in this report to give any comprehensive picture of guidance facilities in general high schools of the state as a whole.<sup>8</sup> Only the impressions of vocational members of the staff in their school visits and the indirect evidence disclosed from questionnaires can be given here. The situation in certain strictly vocational schools, however, will be mentioned.

In investigating business courses in general high schools, a teacher or administrator was seldom interviewed who did not readily admit the necessity of a guidance program, but very few of the schools systematically faced the problem. In some of the larger schools, through a homeroom system or a guidance officer, commercial students were counseled, but in the main counseling was mere mechanical routine and can

<sup>8</sup> For a detailed discussion of this school faculty see Francis T. Spaulding, *High School and Life*, Regents' Inquiry, 1938.

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hardly be said to have existed at all. Guidance officers were seldom reported as being responsible for admission to business courses.

Very little information is available to commercial students concerning promotional possibilities, short-run or long-run wage tendencies, or working conditions. The ninth grade course, Introduction to Business, does have some exploratory value and gives some information as to various characteristic duties of clerical pursuits. Nevertheless the guidance programs as generally constituted do not take into consideration pupils' aptitudes and interests.

By and large, no systematic guidance is provided for students of agriculture, except in Agriculture I. One of the important objectives of this introductory course is guidance. This guidance may be one of the reasons why a large percentage of pupils enrolled in vocational agriculture do not complete the four-year course. In 1932, for example, the enrollment in Agriculture IV was 72 per cent less than the enrollment in Agriculture I. Boys who are not suited to vocational agriculture may enroll in Agriculture I, but are eliminated before the fourth year is reached. A serious question is, What happens to them?

On the whole, vocational industrial schools are conscious of the necessity of an adequate guidance program, but far too few of them possess desirable facilities. Ninth-grade tryout courses and early transfer to courses in keeping with the real interests and abilities of boys and girls have been used in some New York City schools. The system for the selection of pupils in use in another city was discussed in Chapter III, under admissions.

In contrast to the procedure followed in that city, which conducts a spring campaign, the situation in a school in still another city should be mentioned.<sup>9</sup> In the latter the aim is

<sup>9</sup> The vocational members of the Inquiry staff do not maintain that this program is a model to be followed by all schools, but the plan is worth discussing in

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guidance through scientific diagnosis rather than the selection of only a few students. All students are admitted for tryout courses, of which there are twenty-four. From the day of his admission to the day of his discharge, the pupil is assigned to the same adviser. The adviser has a homeroom with about thirty pupils. Three or four periods of the teacher's weekly program are set aside for individual counseling of his pupils. The adviser is responsible for the school adjustment of his pupils and takes the initial steps in calling into play the special guidance services provided by the school. These are: welfare, counseling, group and individual testing, health counseling, program and personality adjustment, and placement.

Every pupil in this school, either before or soon after admission, is given intelligence, reading achievement, and arithmetic achievement tests. The results are entered on the cumulative record card in the adviser's roll book. Each teacher is also furnished with the results. Pupils whose scores on the group tests are either very high or very low are given such individual tests as the following: Stanford Revision of the Binet-Simon Test, the Pintner-Paterson Performance Scale, diagnostic tests to determine causes for reading disabilities, and various mechanical aptitude and ability tests.

The counselor in the admission bureau attempts to determine whether the pupil will be able to profit by attendance at the school. He questions the applicants to determine the best shop placement for the tryout purposes and whether any health or social adjustment problems should be taken up immediately. An attempt is made to determine whether or not the pupil should be assigned to a particular adviser, who may be more capable than others in aiding this individual type of pupil.

After the ninth year tryout the pupil is retained in the school in his chosen course if that course is a terminal one. If

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some detail in order to show how one school has attempted to meet the problem of selection and guidance when a wide variety of courses is offered.

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not, the pupil is transferred to another school which better suits his interests, needs, and abilities.

In a school in another city, the principal assumes chief responsibility for guidance, while the shop teachers are incidentally responsible. A number of features are of interest in the program of this school. Each ninth grade boy is visited in his home by a faculty member during the spring to get the point of view of the boys' parents concerning his adjustment. Guidance through exhibits, talks, and motion pictures in more than one hundred meetings with community groups helps to explain the occupational offerings of the school. A guidance period is provided, when outstanding boys from upper classes explain to beginners the occupation which the upper classmen are pursuing. Owing to the lack of an adequate guidance program in the elementary schools, two to three times as many boys from parochial schools attend this vocational school as come from public schools, although the parochial school population is about the same as that of public schools.

### PLACEMENT AND FOLLOW-UP WORK

Generally speaking, the strictly vocational industrial and technical schools or departments consider the placement of graduates as a function of the school. The function may not be as satisfactorily performed as is desired, but at least it is assumed by such schools. The principal exception was found in the field of business education.

In a few of the larger schools where commercial work is given, organized placement systems have been established, but in the main, and this is true even of some of the larger schools, placement, except in colleges and universities, is not considered an obligation of the school. In many schools, placement is done on an informal basis by a member of the teaching staff. When it is remembered that the average business teacher has five classes, with thirty-five or more students in each class, it is apparent that any full-time member of the teaching staff can have little time to give to organized placement.

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The actual evidence concerning employment of high school commercial graduates indicates that during 1936 in the high schools for which information is available, less than 30 per cent of the commercial graduates were employed in jobs involving the skills in which they were trained.

Unless a home economics or homemaking class is part of a large high school which has a placement system, only an informal and unorganized employment service is used. Sometimes even this service is lacking. When homemaking is given in a vocational trade and industrial school, more attention is paid to placement.

Vocational industrial and vocational technical schools consider the placement of graduates as an obligation of the school. The placement is accomplished in a number of ways, with varying success in each school. The chief agents used are: placement officers in the employ of the school, principals of vocational schools and shop teachers, advisory boards and advisory committees, and the New York State Junior Employment Service, either independently or in cooperation with the schools. In general it may be said that the New York State school system does not have at present a suitable organization for placement of minors. In one large city, most of the vocational schools have one vocational counselor giving half time to placement. This plan is woefully inadequate. This provision was made only after the law was passed requiring vocational guidance bureaus in cities of over 100,000. In another city there is only one placement officer for the whole school system. The work is evidently efficiently organized by the person in charge, but he seems decidedly overworked.

In 1935-36 the vocational schools in New York State reported 63 per cent of the graduates in the trade for which they were trained or in closely allied occupations, within five months after graduation, according to the incomplete placement figures for various courses given in the State.<sup>10</sup> These figures are

<sup>10</sup> Not all schools in New York City furnished data, and the information for several other schools is far from complete.

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much less complete than those for other states in the northeastern part of the United States. Massachusetts, for example, has much better information, and for a longer period, than does New York. It was impossible to determine how the phrase "trade for which they were trained" was defined, or whether it was used uniformly by all schools.

There is no evidence available of what happened to the dropouts. This is regrettable when it is considered that the number of dropouts in some courses and in some schools is fairly large.

A controversy exists regarding who should actually perform the placement service. Certain vocational educators believe that placement by persons who are not in close contact with vocational teachers is less efficient than when the employment office is located in the vocational building where teachers are able to give personal reports of students based on an extended acquaintance with them. They say that any of the facts essential to successful placement are not easily recorded on personnel records unless a tremendous amount of clerical help is made available, and furthermore, that the contact with industry by teachers and coordinators charged with the placing of graduates is an indispensable means of keeping the vocational curriculum up to date.

The consensus among vocational educators seems to be that every vocational school should have a placement office and that the school should be concerned primarily with the initial placement and the immediate adjustment of the pupil. Beyond this point, they maintain, the State Employment office should function. If used for initial placement, it should only be supplementary to the placement work of the school.

During the period when the continuation schools had large enrollments, the State Junior Employment Service maintained offices in nearly all of the New York City continuation schools and in a number of upstate schools. Owing largely to the decline in the enrollment in these schools and also to a ruling

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of the United States Employment Service, this work has been discontinued. This situation has caused resentment on the part of some vocational educators. As a consequence of the withdrawal of the New York Service several schools now have full-time placement workers.

As yet no state plan of cooperation between the vocational schools and the Junior Employment Service has been worked out. It would seem that the two groups could work together much more closely than they do. The Regents' Inquiry was informed by the Junior Employment Service that an attempt was being made to develop a mutually satisfactory relationship.

Follow-up work is a concomitant part of the placement function, and is also of assistance in helping teachers and school administrators to revise the content of courses and to plan more adequately their programs. Follow-up work provides a means of finding out whether the training a pupil received is helping him to function on the job.

At the present time, practically no organized follow-up work is carried on among commercial or home economics or homemaking or agricultural graduates in the general high schools. Some teachers in home economics keep in touch with their former students, but unless the teachers remain over a period of years in the school, this follow-up work is soon broken. The Bureau of Agricultural Education from time to time has made follow-up studies of the graduates of high school departments of vocational agriculture,<sup>11</sup> but no continuous and systematic follow-up work is carried on. The Bureau is planning to maintain a card index of the graduates of such courses, so that in time accurate information about what happens to these pupils should be available.

Follow-up work in vocational industrial classes was given a decided impetus by the request during the past year from the

<sup>11</sup> Cf. *Thirtieth Annual Report of the Commissioner of Education of the State of New York for the School Year Ending June 30, 1933*, p. 115, and the *Twenty-Sixth Annual Report*, pp. 121-22.

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United States Office of Education for a statement of students placed in the occupations for which they were trained, or in allied occupations. This study used June, 1936, graduates. As a result, data collected with varying degrees of accuracy were available in a number of centers.

At no vocational school did the members of the Inquiry staff find any interest in following up nongraduates.

## CHAPTER V

# Secondary School Programs and Vocational Adjustment—Cont'd

### RELATION OF TRAINING TO COMMUNITY NEEDS

WHEN the statement is made that a vocational school determines its program upon the basis of local needs, the implication is that it knows the local needs. To what extent do the administrators of the various fields under discussion conduct careful and continuous surveys of such questions as the long-run needs of the community or reliable estimates of the ability of the community to absorb the graduates? Since the conditions of the fields vary, each will be discussed separately.

#### *Industrial Schools*

The principals of vocational trade and industrial schools were asked, What courses, if any, should in your judgment be added to the present offerings? Over thirty-five suggestions were given, for example, air conditioning, sheet metal, paper hanging, pattern making, beauty culture, neon signs, radio, candy making, Diesel engine construction, building maintenance, and practical nursing.

The fact that this large number of courses was suggested by the principals raises the question whether adequate analysis of the labor market, both present and potential, has been made to justify adding these new courses. Have adequate local surveys been made which point conclusively to such demands? Is the judgment of these principals supported by objective evidence of need? Current placement statistics alone cannot be relied upon to answer these questions, since they are not

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always an indicator of long-run needs. They reflect cyclical conditions as well as long-run trends. Furthermore, they manifest a situation which should be identified before the pupils are ready for employment. To rely solely on placements is essentially a trial and error method, using human beings as the experimental material. More basic means of uncovering underlying trends are needed. But the Regents' Inquiry staff observed that both the State Education Department and the localities make only sporadic attempts to promote and conduct continuous local surveys which would reveal basic trends.

The primary contribution of the State Education Department has been the bulletin entitled, "Changes in the Occupational Pattern of New York State,"<sup>1</sup> written by Dr. Bradford F. Kimball (not a member of the Department) for the Educational Research Division. This study is based mainly on census data and portrays the occupational shifts which have occurred in the State. Occasionally, a special study is published by the Vocational and Extension Education Division on some particular occupation. For example, in 1937 this Division issued a bulletin, "Careers in the Diesel Engine Field." As a rule, however, no systematic and continuous studies are published by the Division, largely because of the lack of sufficient, not of adequate, personnel. Insofar as the State Education Department is concerned, then, there is comparatively little information on the State's needs for training in various fields. Even if this information were available for the State, studies of local needs would still be necessary.

What has been done by the localities concerning research in desirable types of courses to be offered? So far as could be ascertained, occasional studies of one kind or another are made, but no community makes any continuous detailed survey of its occupational needs. In April, 1937, the Advisory

<sup>1</sup> *Educational Research Studies*, No. 2. Published by State Education Department, Albany, 1937.

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Board for Vocational Education in Rochester made a study in which it attempted to obtain definite information regarding the employment opportunities in that city. The Rockland County survey, reported in *Occupations* of May, 1936, is undoubtedly one of the most complete studies of a locality made in the State. The vocational advisory board in New York City, which is made up of employers and employees, has made several studies dealing with particular industries.

The elaborate study made by the Vocational Survey Commission of New York City in 1931 also deserves mention. Among other things, this survey recommended that "Research and survey in industrial education should continue under the associate superintendent in charge of vocational education."<sup>2</sup> The Regents' Inquiry was informed that this recommendation had not been carried out in any systematic fashion. A survey of vocational industrial education was made in Seneca Falls in 1933. This study illustrates how the needs of a small community can be surveyed.<sup>3</sup> Other studies have come to the attention of the Inquiry staff, but they represent fragmentary and discontinuous investigations of the problem.

Special surveys have been conducted, or are being planned, in certain communities regarding the desirability of establishing vocational classes. Suffolk County recently made a survey to determine whether or not a county vocational school was needed. The Chamber of Commerce of Newburgh made a survey of the needs of industrial and commercial establishments. The Board of Supervisors of Nassau County plans to make a survey of the educational and vocational needs of the county.

That vocational educators recognize the importance of local surveys was obvious from conversations and correspondence,

<sup>2</sup> Vocational Survey Commission, *Vocational Education and Guidance in New York City*, Report No. 1, revised, November, 1932, p. 10.

<sup>3</sup> H. L. Mott, *Survey of Vocational-Industrial Education in Seneca Falls, New York*. Unpublished M.A. Thesis, Cornell University, 1933.

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but the wish was not always father to the act. Too frequently only casual and informal surveys were evident. The meagerness of these attempts is partly due to the lack of time on the part of principals and teachers and partly due to inadequate training in research techniques. This situation should not reflect on the principals and teachers, for their training has largely been in shop and not in research work. However, it indicates that provisions should be made for more adequate investigation in the fields of occupational needs.<sup>4</sup>

So far as could be determined, there was no organized interest in research concerning job analysis and job specifications, which would be highly desirable in determining the content of courses. In fact, this is a primary means of developing such subject matter.

### *Agricultural Courses*

Since vocational agriculture courses are based on the principal farm enterprises in the school area, they must be based on local surveys. The teacher of agriculture ascertains the relative importance of the several farm enterprises from farm survey data and from United States Census reports.<sup>5</sup>

### *Commercial Courses*

There is little distinctive character to the business education program on the secondary school level in the various regions. The standard pattern governs and, in general, regional, community, or economic differences play a very slight part in determining courses. Even the methods of teaching are very similar. Very little adjustment has been made to relate the program to the particular needs or peculiarities of the com-

<sup>4</sup> The above criticism does not necessarily hold when we are considering the content of a particular course. In such cases the teacher has had a training in the specific field under consideration.

<sup>5</sup> The results of several typical surveys were analyzed by a staff member.

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munity. In rural areas it will be found that the commercial course is simply a large urban high school course in miniature. Occasionally some effort has been made to adapt business education to local needs. In one high school the teacher of bookkeeping cooperates with the agriculture teacher in the work of organizing information in farm bookkeeping. This practice, however, is not common.

Apparently little research is being conducted in terms of job analysis, long-run possibilities, community trends, or searching examinations of the clerical labor market. Many of the New York State employment agencies report that it is difficult to place the graduates of the local commercial high school courses. There is considerable evidence to indicate that most commercial teachers and department heads do not avail themselves of the data on local employment conditions, which can be secured from the State employment service. The principals of schools giving business courses suggested a long list of courses or subjects which they believed should be offered. The two most frequently mentioned were office practice and retail selling. A questionnaire to teachers elicited a wide variety of suggested offerings. Again the question arises, to what extent are these suggestions based on surveys of real needs? Only 10 of 68 principals answered that anyone in their school or community had made any studies concerning the relationship between business training and eventual employment.

### *Homemaking Courses*

There is unquestionably a need for capable homemakers in every community. The experience and observation of many who have been concerned with relief, and with trying to aid families in order to keep them off the relief rolls, indicate the social and economic value to the family, and the saving to a community, of a mother who is well trained in homemaking. There can never be too many individuals in a community who

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are able to manage successfully their own and their family living.

The employment opportunities for individuals trained in homemaking skills vary from community to community, yet in almost all of the schools visited or reporting to the Inquiry, no organized effort was being made to determine the needs of the community for individuals so trained. In some cases the more alert teachers use check lists or a similar device to ascertain the needs, abilities, interests, and activities of pupils. The information gained from visits to homes and from social contacts with families also aids the teacher in developing her courses.

### *Desirable Local Needs*

So far as could be ascertained there are no criteria generally followed in deciding whose needs should be considered. The Education Law states that vocational education shall prepare for "useful employment." But what is "useful employment"? No attempt has been made to define this term.

The need for accepted principles is evident, especially in view of the recent passage of the George-Deen Act.<sup>6</sup> A principal of a vocational school offered the following advice to the members of the National Dry Goods Association at its annual convention in January, 1937: "We are spreading the good news [*i.e.*, regarding the George-Deen funds] . . . and those who come first will be the first served."<sup>7</sup> Such a policy means that the training program would be determined by the most articulate of the employer groups. Obviously employer cooperation is essential, but it is questionable whether "first come, first served" should be the determining factor. This

<sup>6</sup> The Federal Act (Public No. 673, 74th Congress, approved June 8, 1936, effective July 1, 1937) which authorized increased federal appropriations for vocational education to the states and territories.

<sup>7</sup> *The New York Times*, "Schools to Insist on Aid of Business," January 23, 1937. This statement was subsequently verified through personal interview.

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attitude represents the failure to develop any basic social philosophy regarding desirable offerings.

### EQUIPMENT

The State Education Law and the rules of the Regents contain provisions concerning adequate buildings, equipment, and supplies. For example, Section 610g specifically states:

If . . . a board of education fails or refuses to provide the teachers, supplies and equipment deemed by the commissioner of education to be necessary for the giving of the instruction required by the approved courses of study, he shall withhold from the moneys annually apportioned to the city or district an amount equal to that which such city or district pays in salaries to the teachers of vocational subjects, guidance, practical arts or adult education classes.<sup>8</sup>

State funds are seldom withheld if a locality does not maintain these standards.

This situation would not be important except for the fact that in all too many localities inadequate, antiquated equipment or insufficient supplies, or both, are frequently found, especially in the trade and industrial classes. Some schools are more favored than others. From two sources in one large city information was advanced that supplies are so difficult to obtain that teachers buy sufficient supplies to keep their classes in session, and are not reimbursed for these expenditures. Less than one dollar per pupil per year is provided for supplies by this community. Such a situation is deplorable and makes teaching not only difficult but often impossible. In contrast, another large community spends seven or eight dollars per pupil annually.

Members of the Inquiry staff visited a community in which a class in carpentry had only a few pieces of wood with which to work. In some schools the machinery used is ten to fifteen years old.

<sup>8</sup> University of the State of New York, *Education Law as Amended to July 1, 1936*, Bulletin No. 1095, 1936, p. 234.

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In only one community visited with reference to industrial education was an adequate plan of equipment replacement in operation. It is worth repeating that in many vocational industrial schools the present situation with regard to supplies and equipment needs serious attention.

In the commercial field the equipment is mainly limited to typewriters. Business teachers throughout the State report a shortage of typewriters and equipment. Very few schools, excepting the larger ones, possess modern office equipment, such as bookkeeping machines, comptometers, various types of duplicators, and the like. Teachers, department heads, and school principals in general regard the problem of equipment as acute.

The problem of sufficient equipment, however, does not appear to be as serious in home economics and vocational agriculture, except perhaps where there are farm shops.

### INSTRUCTIONAL STAFF

Owing to the nature of the certification requirements, vocational industrial teachers of shop subjects have on the whole more vocational experience and less educational experience than have teachers of home economics, agriculture, technical, or commercial subjects. Industrial teachers are required to have completed an approved elementary and secondary education equivalent to junior high school graduation, one year of professional teacher training, and five years of journeymen experience in the trade which they teach. The other fields require, in general, the completion of an approved four-year curriculum leading to an appropriate degree or its equivalent, including professional teaching courses, while the teachers of technical subjects are required in addition to have had at least three years of approved technical experience. These varied requirements result in different degrees of occupational experience among the teachers and variations in the extent of trade contacts maintained by them.

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### *Commercial Courses*

Although vocational experience is not required of commercial teachers, a majority of those reporting to the Regents' Inquiry have had some form of business experience, usually in clerical work. Generally this has been less than a year's experience in an activity of a nondecision-making character. In other words, it has been of a routine nature.

The education of New York State commercial teachers varies considerably. In general, business teachers have been trained in public or private institutions within the State. Many upstate teachers have been trained in the State Teachers' College at Albany, whereas those teaching in New York City have been trained in institutions in the City.

A special study of commercial teachers disclosed that very few business teachers write for professional journals, although some reported that they prepare syllabi for courses. In general, the reading of the business teachers is limited to a few pedagogical journals. The journal read most often, the one which the business teachers reported as being professionally most useful to them, is the house organ of a leading commercial publishing firm, which is sent to them without charge. There is little evidence that commercial teachers in general keep themselves informed as to local, state, or national trends in such matters as technological developments, business trends, employment conditions, et cetera. The business teacher is frequently content to be a good classroom teacher of his special subject, without reference to what is happening in the changing economic scene.

### *Home Economics and Homemaking*

The principals of high schools visited have considerable difficulty in obtaining and retaining competent teachers for their home economics and homemaking classes. Part of this trouble is due to the fact that many of these teachers marry and quit teaching. One can probably infer from their high

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marriage rate that these teachers are well adjusted and appreciate home life, and hence are well qualified as teachers.

Most home economics and homemaking teachers in the schools visited were active members of county home economics teacher groups, and were appreciative of the value they derived from meeting regularly with other home economics teachers for a discussion of their individual problems and for following specific lines of study or investigation. They also seemed to count attendance at summer school a desirable professional activity.

When possible, these teachers arranged visits for their classes to manufacturing, retailing, or service organizations, and were interested in making visits to such other plants as they found convenient.

This group of teachers believed that their activities and contacts with local organizations, such as parent-teacher associations, Girl Scouts, the Red Cross, and the churches, were very valuable in giving them an understanding of the home and family life of the community. Most of these teachers were fairly sensitive to present social and economic trends.

### *Vocational Industrial*

A serious problem in the field of vocational industrial education was found in one community of the State. Forty per cent of the teachers held only a substitute's license, the qualifications of which are less than that for a provisional certificate. This situation was not due to an emergency, but had existed for some time. Whatever may be the reason or reasons for it, and many conflicting ones were offered, its continuance presents a serious problem. Some of these substitute teachers have taught for several years. The Regents' Inquiry was informed that such persons had been retained on the teaching staff from ten to fifteen years. If the person failed to pass the regular examinations for a teaching certifi-

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cate, he could continue teaching as a substitute teacher. Two members of the Inquiry staff talked with one man who had failed to pass his examinations three times, but was continuing to teach and probably would remain in teaching as long as he desired. This deplorable situation was fortunately confined to only one community in the State.

On the whole, vocational industrial teachers maintain some kind of contact with the trade through membership in various organizations, occasional work at the trade, visits to plants, or by some other means. The contacts, however, may or may not be systematically carried out. Some of the reasons why these teachers recognize the desirability of a contact with the trade are that their training has been essentially an industrial or trade training and they have, therefore, already built up contacts which they wish to maintain; they are conscious of the school's obligation in the placement of pupils; and the nature of their instruction necessitates close observation of trade practices.

### *Vocational Agriculture*

The vocational agriculture teacher, as has been pointed out, bases his course on the types of farming activities in the community and thus maintains local contacts. In addition, he visits his area in connection with the supervised farm practice work.

### *Training of Teachers*

Briefly, what is the situation regarding the training of teachers in the various fields? Since the problem of training vocational industrial teachers is quite distinct, it will be discussed separately, following a discussion of the training of home economics, homemaking, commercial, agriculture, and industrial arts teachers.

While it is true that many teachers of business subjects have gained a certain degree of competence in business background

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subjects while in service, it is also true that their training has been for the most part unsystematic. The New York teacher who has had an adequate background in economics and business, marketing, finance, personnel, statistics, business organization, business policies, et cetera, is a relatively rare person. Such a situation is the result of serious neglect in the field of business teacher training.

Home economics and homemaking teachers are trained in both public and private institutions in the State. Some principals spoke favorably of teachers trained in certain private institutions, while others spoke favorably of graduates of a state institution. The Bureau of Home Economics Education devotes considerable time to the question of improving the teacher training work in the institutions throughout the State. The Bureau has sought to improve the program by means of state conferences with instructors of home economics training courses, conferences with staffs of separate colleges where such training is given, conferences with directors of student teachers, conferences with individual teachers in teacher training departments, and conferences with senior students. The supply of well-trained teachers in this field is less than the need.

Teacher training in agricultural education is given in the State College of Agriculture. The Bureau of Agricultural Education actively cooperates with this institution, as well as with the Teacher Education and Certification Division, in the development of courses for teachers of agriculture. The Bureau also cooperates with the Teacher Education and Certification Division in establishing minimum standards for certifying teachers of vocational agriculture and for evaluating credentials of all applicants for teaching certificates. This latter function is also performed by the Bureau of Home Economics Education and the Industrial Education Bureau, both of which are part of the Vocational and Extension Education Division.

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### *Industrial Arts Teacher Training*

The four-year approved undergraduate training for prospective teachers of industrial arts is offered at the Buffalo State Teachers College, the State Normal School at Oswego, and New York University. Summer work is also offered at Buffalo and Oswego.

The difficulty with the present situation is that the industrial art work at Oswego does not culminate in a degree. Many of the Oswego students leave at the end of the third year to finish their work at a degree-granting institution, for many superintendents will consider only those applicants who have degrees. Such a change usually means that the student has to sacrifice some of his credits. If only a few students at Oswego took this work, the situation would not be serious, but this is not the case. During a recent school year, the enrollment at Oswego was as follows: first year, 63; second year, 42; third year, 58; and fourth year, 13, making a total of 176 students. The decrease in the fourth year enrollment is marked. For the same year, the enrollment at Buffalo was: first year, 32; second year, 23; third year, 22; and fourth year, 21, making a total of 98 students.

The curriculum in these two schools is identical. Since the Oswego school does not grant a degree, many superintendents are under the impression that the Oswego program is below standard. This is, of course, a handicap to its graduates in securing teaching positions. Furthermore, graduates of industrial arts teacher training institutions in other states, which in some instances offer a less appropriate curriculum than Oswego, but which confer recognized degrees, have, because of this fact, a decided advantage over the graduates of Oswego.

### *Teacher Training in Public and Private Institutions*

From the discussion of teacher training in the various fields mentioned so far, it may be noted that instruction in some

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fields is given either in private or in public institutions. So far as could be determined from interviews with principals, neither group of institutions was consistently superior. It would seem that the important consideration is not whether the work is being done in a public or private institution, but whether the work is being done effectively by an institution capable of rendering the service through proper equipment, personnel, and point of view. Such institutions may be either public or private.

### *Vocational Industrial Teacher Training*

The vocational industrial teacher training program in the State is conducted on a different basis than those previously mentioned. The federal laws under which vocational education is established provide that the training of teachers shall be a function of the State Board for Vocational Education. The function may be delegated to teacher training institutions or the State Board may assume the responsibility directly. In New York State the second group carries this responsibility. The organization and administration of this program, except for summer school work, is under the immediate and direct control of the Vocational and Extension Education Division, through a supervisor of industrial teacher training.

A review of the present methods of preparing vocational teachers in New York State indicates that a well-organized program is in operation, although the number of students undertaking the training is meager. With the upswing in business and the expansion of vocational industrial education throughout the State, there has been such a demand for competent teachers within the past few years that the present facilities for training have been taxed to their utmost.

The chief training center for vocational industrial teachers is located in New York City. During 1936-37 approximately 350 students in forty classes have been in training on a budget of \$7,000. Sixty-one persons were graduated in 1936. It is estimated that the number of persons in training in the City

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should be increased to six hundred, and that at least one hundred of them, while in training, should be used as apprentice teachers in the day schools.

Training of vocational industrial teachers outside of New York City is negligible. During 1935-36 only 56 students were enrolled in the courses being offered in cities, excluding New York City. Vocational industrial teacher training courses have been or are being offered as evening extension courses in New York City, Schenectady, Syracuse, Rochester, and Buffalo. However, only the first half of the professional teacher-training curriculum is offered in the last-named four centers. In order to complete the course, students from these cities may attend the summer course at Oswego Normal School. If trade and industrial education expands, the facilities in centers in upstate New York may prove inadequate to cope with the situation.

At the present time summer school classes in undergraduate vocational industrial work are offered in the State Normal School at Oswego. Certain New York City teachers asked why they should be required to travel over three hundred miles to Oswego to attend summer school, in view of the fact that New York City has the largest vocational education program in the country.

The fact that the control of teacher training in the industrial field is different from the control in the industrial arts, commercial, agricultural, home economics, or other secondary or elementary school subjects deserves some comment. Industrial teacher training today, as has been pointed out, is under the direct supervision of the Vocational and Extension Education Division. In fact the Division is a teacher training institution. This is the one exception to the general policy of centering responsibility for teacher training in the Teacher Education and Certification Division.

The reason for this situation is partly historical. In the early days of the industrial education program it was necessary for vocational industrial educators to assume the task of training

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teachers. There were no existing facilities and the number of teachers desired was small. Although the program at the present time includes the second largest number of secondary vocational students in the State,<sup>9</sup> the training of teachers still remains on the same basis it was on nearly twenty years ago.

### *In-Service Training*

All members of the State Education Department who are interested in vocational education and many of the principals who were interviewed believe that there are desirable features in the work of professional improvement.

One of the present major activities of the Bureau of Home Economics Education, for example, is the promotion of the professional improvement of teachers in service. The work of the Bureau includes preparing syllabi and news articles, studying distinctive and key situations, and using the findings as an aid in other similar situations, and cooperating with teacher training institutions in the State for the purpose of seeing that suitable summer courses are offered. Special mention should also be made of such activities of the Bureau as the Saturday morning conferences held in Albany, a series of county leader conferences, a five-day summer conference of county leaders, 313 county study group meetings for teachers held in different parts of the State outside of New York City in 1935-36, and conferences held at state and district meetings of teachers' organizations. This extremely active, although not very large, Bureau is doing a commendable piece of work in encouraging in-service training, which is valued by all teachers who take advantage of it and is used by them to improve the nature and quality of their teaching.

For a number of years the Assistant Commissioner of Vocational and Extension Education, realizing the value of in-service training, required such training for vocational teachers, and paid for it either wholly or in part from federal funds.

<sup>9</sup> This number is surpassed only by the number of commercial students.

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In 1934, the Board of Regents established in-service training for all teachers in the State. Owing to this fact, the Assistant Commissioner of Vocational and Extension Education suspended the special in-service requirement for vocational teachers. In February, 1935, however, the Board of Regents voted to suspend the in-service requirement for all teachers until September 1, 1936. The present situation regarding professional improvement work is confusing to many vocational teachers and will undoubtedly prove burdensome to enforce in the future.

Although the new regulations requiring all secondary school teachers to get in-service training have been in force since September, 1936, their practical effect is yet to be felt. In other words, a teacher can now get a provisional certificate which is good for several years. He can continue to teach during this period without taking any in-service training, but eventually, when he applies for a renewal of his certificate, he presumably will not be granted it unless he has had a certain amount of professional in-service training.

One part of the training program which does not seem to have received much attention is the retraining of vocational industrial teachers, which is needed because of the changing nature of the occupations for which they prepare their students. Certain principals pointed out that such a retraining program would help the instructors to be flexible in their teaching and would also encourage a more flexible program.

### *Leadership Training*

The future success or failure of the program of vocational education in New York State will depend upon the ability of the State to develop enough capable leaders for local programs. Since 1929 there has been a rapid growth in the enrollment in vocational schools. Local boards of education are searching for qualified persons to act as leaders in the vocational education field. Men and women of the type

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needed are few, but the opportunities for advancement in this field have been increasing.

At the present time the only approved graduate program in the vocational industrial field is that of the Graduate School of Education at Cornell University. Unlike the teachers in the commercial or the home economics fields, the teachers of vocational industrial education who wish to take graduate work are confined in their choice to one institution. Several teachers objected to being forced to seek instruction so far away from home. Furthermore, they questioned the desirability of limiting graduate instruction to a single state-controlled school. They believed that the State should encourage other graduate schools to give appropriate instruction.

### STATE EDUCATION DEPARTMENT AND LOCAL VOCATIONAL PROGRAMS

The commercial, or business, education program is under the direction of a supervisor in the Examinations and Inspection Division of the State Education Department. The industrial arts, agriculture, homemaking and home economics, vocational industrial, and vocational technical programs are administered through the Vocational and Extension Education Division of the Department.

#### *Business Education*

Although few teachers criticized adversely the work of the State Education Department in the field of business education, many intimated that much more attention from the Department is needed and is desirable. Almost all teachers regard the major work of the Supervisor of Business Education to be the preparation and administration of the Regents' Examinations, which at the present time are given in five business subjects—bookkeeping, business arithmetic, business law, shorthand, and typewriting.

Schools generally recognize that the work of the supervisor is greatly handicapped because of the vastness of his territory,

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the magnitude of the business education program carried on in New York State, and the generally inadequate support which his office gets. Fifteen years ago there were two persons in the Division who supervised business education, but today, despite the tremendous increase in enrollment, there is only one supervisor.

In addition to being responsible for the Regents' Examinations, the supervisor is required, among other things, to inspect and supervise the high school commercial departments, to visit the registered private business schools, to prepare special reports, to revise existing syllabi and to prepare new ones, to cooperate with the Teacher Education and Certification Division, to work with the various teacher training institutions, and to maintain contacts with various organizations concerned with business education. In this work he is not even assisted by a full-time stenographer.

## *Vocational and Extension Education Division*

The Vocational and Extension Education Division was established by the Board of Regents on September 3, 1920. It had originally been created as a division of trade schools on September 1, 1908. On July 1, 1928, the Bureau of Agricultural Education, the Bureau of Home Economics Education, and the Bureau of Industrial Education were created. The latter bureau has charge of vocational technical, industrial arts, trade extension, apprentice, vocational commercial, part-time cooperative, continuation education, and industrial teacher training, as well as trade and industrial education.

The Vocational and Extension Education Division cooperates with the Teacher Education and Certification Division and with the Secondary Education Division, as well as with other divisions of the Department. It also cooperates with other state departments, the federal government, advisory councils, and such agencies as employer associations

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and labor organizations. The Division determines general policies dealing with vocational education, supervises existing programs, and renders a variety of services to the local schools.

Regulations established by the Federal Office of Education, and based upon federal acts, determine in large part the policies under which state and local educational authorities may establish classes in vocational education. Chief of these regulations in vocational industrial education are the six-hour school day, the ratio between shop, related, and academic subjects, and the pronouncement that specific trade training shall be the dominant type of vocational industrial education. Through the power of state approval, only those local curricular and educational facilities which conform to the accepted standards receive federal aid. Federal regulations also control vocational agriculture and to some extent homemaking, even though the State does not use federal funds for day classes in the latter field.

The Vocational and Extension Education Division exercises, therefore, considerable control over local programs in such matters as: the purpose of courses, their organization and establishment, the content of courses of study, qualifications and activities of teachers, the submission of records and reports, certain extracurricular activities of pupils, for example, in agriculture, and, to some extent, the nature of the equipment used. In connection with this work the Division aids local administrators through consultation and special reports. In at least one community the local administrators of vocational industrial education seemed to be much closer in touch with officials of the State Education Department than with the other administrators of the local school system.

Much of the work of the Division is in the nature of field service to communities where programs are in operation, and to localities where programs are under consideration. When one considers the innumerable tasks for which the supervisors are responsible, it is surprising that they are able to accomplish as much field work as they do.

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The Division has also been active in preparing legislation and gaining support for it in the General Assembly. This work was referred to by more than one local principal.

The Vocational and Extension Education Division undoubtedly has not given as much attention to industrial arts education as the importance of this work justifies. While there is a bureau chief and a supervisor for agriculture, and a bureau chief and two supervisors for home economics, there is only one supervisor for industrial arts, although the number of teachers and pupils in this field is probably greater than the number in home economics and most certainly greater than the number in agriculture.

The influence exerted on vocational education through the Regents' examinations has been largely in the direction of magnifying bookish elements in the training program. Few adequate tests of vocational skills have been developed. Because of teachers' preoccupation with the subject-matter of the examinations, relative emphases in the programs are in some danger of distortion.

### *Attitude of Local Administrators and Teachers toward State Education Department*

Local vocational administrators and teachers appreciate the work of the various bureaus of the Vocational and Extension Education Division and the relationship is uniformly cordial. The high caliber of the officials was spoken of repeatedly. Only a few adverse comments were heard. One person thought that visits were too infrequent, and another thought that the state regulations concerning teacher training contained too many professional subjects and that too few teachers were being trained. In a few communities certain local nonvocational industrial administrators thought that there was too much interference from the Vocational and Extension Education Division.

In the home economics and homemaking field, all of the local teachers interviewed expressed appreciation of the

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assistance they received from the Chief of the Home Economics Education Bureau and her staff, especially through their visits. However, personal visits by representatives of the Bureau can be made only to a limited number of high school home economics and homemaking departments, because there are so many departments. Teachers receive aid through various conferences and through sundry material prepared for them by the Bureau. For the size of the staff and the available clerical assistance, a very considerable amount of investigation into local and state problems relating to home economics is stimulated and carried forward in cooperation with many teachers in the State. The spirit of helpfulness and understanding which permeates the Bureau was particularly appreciated by the young teachers, who often spoke of the help obtained from the Chief of the Bureau and her assistants.

### *Research*

A satisfactory program of vocational education must be based on careful research. In discussing the relation of the program to local needs, it was stated that it would be advisable to have more research carried on by the State Education Department. At present, it is extremely difficult for members of the Vocational and Extension Education Division or the Supervisor of Business Education to pursue as much research activity as seems desirable. Members of the Division realize this limitation. The lack of adequate research is due not to the failure of the members of the Division to realize its importance, but to a lack of time. The tremendous pressure of supervisory and other duties and the rapid expansion of the programs so far make it impossible to develop the needed research.

In preparing the present report, it was difficult to obtain accurate statistics on certain phases of the work, and sometimes embarrassing to obtain two or more sets of figures

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purporting to cover an identical subject. The most satisfactory statistics came from fields which receive funds from the federal government, because the government requires the State to furnish reports on courses that receive federal aid.

The reporting of inaccurate, contradictory statistics to and from the State Education Department is too common to ignore. To illustrate, a bewildering array of statistics is available on industrial arts. The Secondary Education Division reported that the enrollment in industrial arts in the high schools in the State was 38,879 in 1933-34. There were in addition 437 industrial arts students in academies, making a total of 39,316. A figure practically identical was given by the Vocational and Extension Education Division as the enrollment for the State, excluding New York City. On the basis of a special tabulation from cards returned by teachers, other than those in New York City, another estimate of the Division for the same year placed the number enrolled in ninth through twelfth grades for the state, excluding New York City, at 24,879. If the latter figure is an understatement, and it may be, for it is based only on cards returned, then the total supplied by the Secondary Education Division is too low. Moreover, the latter's figures for 1933-34 show an enrollment of 4,089 in aviation industrial arts classes, although the supervisor of industrial arts states that there are practically no students enrolled in such courses.

This confusion is due to the fact that individuals in the different departments frequently collect statistics on the same question. Some of these individuals are specialists on teaching and administrative matters, but are not versed in statistical techniques, and the collection of statistics is incidental to their work. At present there is a Statistics and Apportionment Bureau in the Finance Division, but its concern is mainly that of apportionment, which in itself is admittedly a tremendous task. As an outgrowth of this work, certain statistics are accumulated. However, there is no central

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statistical bureau whose duty it is to compile adequate and accurate statistics for all purposes. It is questionable whether a special statistical report of nearly four hundred pages should be issued each year, unless the figures can be avouched reliable. At the present time they obviously are not.

### *State Advisory Boards*

There is a specific provision in the Education Law for the creation of an Advisory Council on Apprenticeship Training, which became effective in 1935. Two other councils exist, the Industrial Education Council and the Agricultural Education Council, both created, not as a result of specific provisions in the law, but through the broad general powers of the Regents.

Since its creation, the Apprenticeship Training Council has been active; it has held hearings and meetings, and in 1937 submitted a report to the Regents.

In contrast, the Industrial Education Council and the Agricultural Education Council have been inactive for some time. After it was first organized, the Industrial Education Council helped to formulate general policies. The Council has not met since 1932, and its membership has not changed much over a period of years. Three of the five members who were on the Council in 1910 were still listed as members in 1936. Part of the Council's inactivity may be explained by the fact that all it can do is to advise on questions of general policy, which are influenced largely by federal policy. Since it is a general committee, not a committee covering a specific trade, it can render only slight help on questions dealing with specific trades. The inactivity of the Committee is also probably due to the fact that its specific duties are limited and it is not required to submit any definite reports.

For practically the same reasons the Agricultural Education Council has lapsed into inactivity. As far as could be determined, this Council has not met in eighteen years, although

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individual members have been consulted from time to time, but no oftener than have other individuals in the State who are interested in agricultural education. At the present time neither the Industrial Education Council nor the Agricultural Education Council seems to be performing any useful service.

Once every five years the State Education Department is required to submit to the Federal Office of Education a five-year plan for programs which receive federal aid. A plan was submitted in 1932, and a new one in 1937.

The 1937 plan follows in detail a topical outline required by the federal office and consists largely of a statement of the standards to which the State expects to adhere in its programs receiving federal aid. The outline really constitutes a convenient check list to be used by the federal office in determining whether the State is complying with various rules and regulations.

### RELATION TO FEDERAL GOVERNMENT

With the exception of courses given in vocational schools, the federal government has had far less influence on commercial education than it has had on vocational education. In vocational agriculture, vocational industrial, and even vocational homemaking (for which the State has never used Smith-Hughes funds to reimburse high schools), the influence of federal rules is a determining factor. We should remember, however, that New York State had already developed a vocational education program at the time the Smith-Hughes Act was passed in 1917, and that this earlier program was undoubtedly influential in the formulation of the federal rules originally drafted. Nevertheless, the existence of these federal regulations has without question caused the State's program during the last twenty years to follow the established lines.

Since federal funds have not been used for homemaking classes in New York State, it has not been necessary for this

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type of education to comply with federal regulations. Even so, the program in homemaking as developed in the State has in the past placed too much emphasis on vocational or technical aspects of the work. The New York homemaking program has, without doubt, been strongly influenced by the character of the program in home economics, as furthered by the activities of the federal office. The trend away from manipulative processes toward greater emphasis on the problems of family relationship and child care, with increasing recognition of the importance of intelligence and judgment in meeting personal and family problems, has followed that of the Office of Education and of other states. As far as could be determined, the program has not been handicapped by lack of federal funds. It has, of course, benefited from the research activities of the federal government.

The State Education Department, in its administration of vocational education in state schools of agriculture and local high school departments of vocational agriculture, is influenced by the Federal Office of Education, in determining its policy, the activities of the teacher of vocational agriculture, the relationships with other federal, state, and local agencies, and the extracurricular activities of pupils.

The Federal Office of Education maintains a staff of regional supervisors and of specialists who make direct contact with state directors of vocational education, state supervisors of agricultural education, and teachers of vocational agriculture training in each state. These contacts are made through personal visits, through national, regional, state, and district conferences, and through letters of instruction sent direct from the federal office. These agents also make direct contact with teachers of vocational agriculture through personal visits, local meetings, state conferences, and correspondence. Another important federal contact with the state office is the annual audit of expenditures in the State of federal funds for vocational education and teacher training.

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As we have seen, there are several rules and regulations prescribed for industrial courses receiving federal aid. Fortunately, these federal rules have not resulted in as much rigidity in the New York program as they have in other state programs, because the amount of federal aid in New York State has been equal to only about 15 per cent of state aid for vocational agriculture, trade and industrial, and continuation classes. Even though the federal aid is proportionately small, it has, nevertheless, often been a determining factor.

In 1918, the first year in which federal aid was granted for vocational work, the State received a total of \$115,504.26 from the federal government. This sum increased constantly, with the exception of two years, until in 1936 it reached \$845,320.25. During this period of nineteen years the State has been granted \$10,388,381.50. The greater part of this fund has been used to reimburse localities, but each year a certain amount has been used to pay part of the salaries, (approximately one-half), of state supervisors and directors of vocational education. In 1918 part of the salary of five persons was paid from federal funds. The total amount given by the government was \$3,242.50. By 1936, fifteen persons were being partly paid from these sources, the sum amounting to \$19,086.60. During the nineteen-year period, \$273,599.71 has been used for salaries.

These prescriptions, particularly in vocational industrial education, in the past have proved, in many cases, a boon to local communities where education was dominated by leaders who fought the introduction of vocational education into the school program, or were only willing to offer it in the most diluted form.

The leaders in vocational education, therefore, sought the influence of state and federal prescriptions to be taken on an all-or-none basis. A subsidy was offered in the form of special financial aid, which proved to be attractive to school boards.

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The Smith-Hughes Law, like most statutes, was a compromise, but at the time it was passed was a remarkable piece of legislation. For one thing, it drew attention to certain important needs of youth. It is quite safe to say that without such early regulations much of present-day vocational education for the trades would be undistinguishable from the formalized manual training with which industrial education leaders were then so thoroughly dissatisfied. But, unfortunately, the federal regulations are of such a character that only pupils who live in areas where population is highly concentrated have the privilege of taking courses in the field of vocational industrial education.

Even in those centers which receive federal aid, the prescriptions and bases for federal aid have restricted the program. It has been difficult, for example, to develop a desirable program for semiskilled trades, because the federal office has emphasized training for a specific vocation. The federal rules make no provision for federal aid for guidance and placement, although admittedly these services should be an essential part of any program of vocational education. The part-time evening trade extension program is restricted almost wholly to youth who are, or have been employed, in a trade. This means that the improvement of vocational competency, admittedly most desirable, is strongly encouraged, while adult trade preparatory classes are frowned upon, if not entirely prohibited. With changes in industrial opportunities, workers need retraining, which at present is not available unless they are already employed in the trade or have been employed in the trade.

### PUBLIC INTEREST

Without an interested public, vocational education would not have developed as much as it has in New York State. The willingness on the part of the public to build and support huge vocational high schools is evidence that it believes a desirable

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service can be performed. At present, objective evidence is found in the plans for the expansion of vocational facilities, especially in New York City, where an extensive program is being projected. Another indicator of interest is the space given by prominent New York papers to articles on vocational education. The avidity with which certain local vocational advisory boards representing the lay public have applied themselves to the task of keeping the schools in touch with industry is an indication of keen public interest. While the program, particularly the industrial program, has been eagerly accepted in many places, in other localities little interest has been shown in trade and industrial education.

Although most businessmen are probably indifferent toward the commercial training offered in local schools, many of them, especially in periods of business upswing, seek the superior commercial graduate of the local high school. The functions of the local high school commercial departments have been largely those of supplying clerical and stenographic helpers. A few employers of commercial graduates are considerably interested in the training offered within the school. These men no doubt wish to reduce the training costs of the business enterprise concerned. Some interest in the field of training for retail occupations has been developed, particularly because of recent interest in the federal George-Deen Act. However, some businessmen are rather antagonistic toward the present business program in the high school, because they believe the type of training offered is obsolete, and that the effect of the training program is to flood the market with immature and inadequately trained clerical workers. They believe that attention should be given to a more fundamental type of training.

Home economics and homemaking programs frequently have been introduced, where there had not been any appreciable local demand. If they were introduced, however, under teachers who were well qualified, with equipment that was

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adequate, both students and parents usually have become staunch supporters of the work.

Concerning the relation between labor organizations and courses in vocational education, it can be said that in the business education field there is practically no cooperation with labor groups. In fact, many teachers looked upon the possibility of such a relationship with surprise. Probably part of the failure to enlist the aid of labor organizations is due to the fact that up to the present time there has been little or no union activity among workers in the clerical or semi-professional office occupations.

In contrast, labor unions have shown some interest in certain phases of industrial education. As early as 1907, the American Federation of Labor declared in its annual convention:

We favor the best opportunities for the most complete industrial and technical education obtainable for prospective applicants for admission into the skilled crafts of this country, particularly as regards the full possibilities of such crafts, to the end that such applicants be fitted not only for all usual requirements but also for the highest supervisory duties, responsibilities and rewards. . . . <sup>10</sup>

Unions are sometimes represented on local advisory boards and their advice and assistance is frequently sought and found helpful to the schools. Their assistance has been extremely helpful, for example, when new school buildings are contemplated. In one community it was the concerted activity of labor unions which finally resulted in a new building. In at least one instance, the union seemed to dominate the situation almost entirely, deciding in detail what should be taught and to whom. Many vocational teachers have been, or

<sup>10</sup> During the last few years there has been some dissatisfaction expressed by certain labor leaders in the country with the program of vocational education. See an *Editorial* in the *American Federationist*, Vol. 44, No. 4, April, 1937, p. 359, and also Hearings before a Subcommittee of the Committee on Labor, House of Representatives, 25th Congress, First Session on H.R. 6205, *To Safeguard the Welfare of Apprentices*, 1937, p. 91.

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are still, members of unions and thus maintain a contact with labor.

On the other hand, the relation with unions was in some localities only sporadic. Their advice was sought infrequently. More than once, certain unions appeared indifferent to the work being done by the school. The teacher of a printing class complained that the union officials would not inspect the work of the school. The unions simply ignored the training offered.

School officials and unions have in certain centers worked out an arrangement concerning apprenticeship education. Unions have been interested also in the development of trade extension work, at least to the extent of wanting the work restricted to those already in the field.

A brief questionnaire was sent to all the central labor councils in the State who were members of the American Federation of Labor, regarding their participation and interest in local programs of vocational education. The response was so meager that a duplicate was sent to each council not responding to the first questionnaire. The total replies received were still so few that it has not seemed advisable to make generalizations based on them. No answer was received from any large city where vocational education is given at present. One reason for this apathy may be the existence of a surplus of workers arising from the depression. One union executive, replying to the question, What has your council done to further vocational education? said, "No position advocating it because of the surplus of men in all trades." Such an attitude raises the question, What effect has vocational education had on labor standards?

### *Labor Standards*

No direct evidence was presented by the labor unions, that would show the effect of the development of vocational education on labor standards. Since the number of graduates of the industrial program has been until recently compara-

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tively small, unions have probably not considered the situation sufficiently important to warrant serious consideration. It is doubtful whether unions can continue their indifferent attitude to the program. Unions in certain fields may be forced to give more consideration to the effect of vocational education on labor standards because of the depression and increased enrollments. Furthermore, if the unions refuse to recognize in their apprenticeship programs the training given in the school, graduates will seek jobs in open shops and thereby undermine the control which the union exercises.

The situation in the commercial field is different. Although it is difficult to measure with exactness the extent to which business education has affected such matters as wage rates, hours of labor, working conditions, et cetera, in the clerical labor market, over a period of years the widespread offering of certain types of training for clerical pursuits has tended to reduce wage rates relatively. Since 1900, business education has developed in New York State at a faster rate than has secondary education in general. The fact that the real wages in white-collar occupations have declined relative to the real wages of other groups during the last three decades appears to have impressed neither the business teachers nor the parents of the students enrolled in this work. In fact, comparatively little attention has been paid by business educators to the question of the effect of business education on the clerical labor market.

## CHAPTER VI

# Secondary School Programs and Vocational Adjustment—Cont'd

CERTAIN types of education bearing directly or indirectly on the problem of vocational adjustment were omitted from the discussion in the three previous chapters. To have included them would have invited confusion. This chapter will, therefore, present a brief résumé of certain of these important fields, namely, industrial arts, part-time continuation, part-time cooperative, apprenticeship training, and trade extension education. Since the latter is really in the province of adult education and is treated in a special report<sup>1</sup> by the Regents' Inquiry, it will be considered only briefly here.

### INDUSTRIAL ARTS

Industrial arts education, as conceived by the State Education Department, is "a study of industry, its origin, development, activities, products, and their effects upon human life; it is developed through construction work with shop tools and materials, together with discussions, readings, investigation and experimental work."

These courses are considered distinctly nonvocational in character. Indeed, the Education Law states that they should be nonvocational, and the schools are prohibited from classifying such courses as trade, technical, or vocational.<sup>2</sup> Industrial arts education is essentially general education through indus-

<sup>1</sup> F. W. Reeves, T. Fansler, and C. O. Houle, *Adult Education*, Regents' Inquiry, 1938.

<sup>2</sup> Education Law, Section 610c.

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trial means. In no sense does it attempt to teach proficiency or technical skill in a trade or occupation, although its subject matter does deal with a vocation.

The New York City Vocational Survey Commission distinguished two groups of objectives for industrial arts: first, general, and, second, exploratory.<sup>3</sup> The general objectives include an attempt to develop avocational activities, to develop the ability to use common tools, and to provide an opportunity for creative expression and a better understanding of industrial products and processes. The exploratory objective is especially important in junior high school courses where pupils need guidance in selecting some form of vocation. This function is included by the State Education Department among the objectives of industrial arts courses for grades 7, 8, and 9. For example, the tentative course of study in Industrial Arts I for Comprehensive General Shops in these grades lists these two exploratory objectives:

To motivate interest in and create knowledge about the principal fields of industry and the education and occupational opportunity related thereto.

To explore the boy's inclinations, interests, and abilities in occupational pursuits.

During recent years some vocational schools have also introduced tryout or exploratory courses in the ninth year for the purpose of aiding the pupils in the choice of a vocation. There are, for example, classes of this character in one high school for specialty trades where each pupil is encouraged to enter every shop and obtain a wide range of experiences before he chooses his vocation. The belief is that trade finding through shop experience should precede trade preparatory training. The majority of vocational schools in the State, however, have left the exploratory work to other schools.

Regular industrial arts courses are offered in the State in elementary schools and junior and senior high schools. So far as could be determined, approximately twice as many

<sup>3</sup> See report of the Commission, *op. cit.*, p. 26.

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pupils were enrolled in classes below the ninth grade as were enrolled in classes in the ninth through the twelfth grades. Statistics regarding the total number of industrial arts departments and the number of pupils enrolled in them are unreliable. For example, the report for the year ending June 30, 1933, states that "the work is now [school year 1932-33] taught in 253 shops in the State. . . ." Yet, in a tabulation presented to the Inquiry staff this figure was given with the statement that it does not include statistics for New York City. It is claimed that enrollments in the State are around 190,000 to 200,000 pupils. Since the number for the State, excluding New York City, was obtained from cards returned by teachers and there is no indication of what percentage of the teachers responded; and since the Department does not know how many are enrolled in New York City but assumes that the City has about half as many as are enrolled in the rest of the State, the accuracy of its total for the year is open to question.

Although the statistical material is inadequate, certain general trends are evident. For one thing, a larger proportion of the smaller rather than the larger high schools seem to teach industrial arts; enrollments and the number of departments have been increasing; apparently more girls are electing these courses; and more attention is being given to the general shop course. But the Inquiry staff found that the change from the formal type of manual training instruction to the modern enriched program of industrial arts education has been successful only to a limited extent.

It is evident from the fragmentary data available on enrollments that industrial arts courses are not providing a wide range of activities from the varied fields. Far too many pupils are enrolled in woodworking courses. The fact that mechanical drawing is not under the supervision of the Bureau of Industrial Education, to which the Supervisor of Industrial Arts belongs, may account for some of the inefficient teaching

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of industrial arts which was occasionally found. Drawing and design should be closely allied and in many cases a part of the shop instruction. Only in the last few years have any significant enrollments been found in general shop work. The state supervisor has been encouraging the development of these types of industrial art work and has issued courses of study for general shop classes in both the junior and senior high schools. Insufficient attention has also been given to other types of industrial arts work. In addition to woodworking and the general shop work, classes are given in machine shop, electrical work, and automobile mechanics.<sup>4</sup> More use of the general shop and a more varied program seem to be the present needs.

During 1935-36, twenty-six groups of industrial arts teachers, located in different sections of the State, met during the year to discuss the proper procedure to be followed in developing a more adequate program of industrial arts education. Such meetings should eventually result in a more flexible program and a more enriched type of training.

During the past few years various groups of teachers have met with the supervisor of industrial arts for the purpose of preparing courses of study. Several tentative courses have been developed and published for Grades 7, 8, and 9, as well as for the senior high schools. This work, it is believed, has been of value to industrial arts teachers throughout the State.

Generally speaking, the industrial arts teachers both in the urban and rural districts are without sufficient state and local supervision. Since the primary interest of the Vocational and Extension Education Division is in the problems of vocational education, insufficient attention has been given to

<sup>4</sup> Although the Department's statistical report covering the school year 1933-34 states that 4,089 pupils were enrolled in aviation courses of an industrial arts character, the Inquiry staff was unable to locate such classes. In fact, no one in the State Education Department would venture to guess where so many pupils were located in 1933-34. They seem to constitute lost industrial arts pupils.

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industrial arts education, and there is danger that it may become the neglected child of the Division.

### PART-TIME CONTINUATION SCHOOL

The plan underlying the development of the part-time continuation school, according to the Assistant Commissioner of Vocational and Extension Education, was to provide "continued education adapted to individual needs of boys and girls who leave full-time school too early."<sup>5</sup> Instruction, according to the Education Law, "shall include such subjects as will enlarge the civic and vocational intelligence and skill of minors required to attend." In the first few years following the passage of the continuation school law in 1920, attendance was composed largely of pupils fourteen and fifteen years of age, with some pupils sixteen years of age. The situation today is quite different. Effective September, 1936, all children were required to attend full-time school until sixteen years of age, in contrast with the former requirement of fourteen years. The schools are, therefore, dealing with different age groups.

Without going into detail, the continuation law at the present time caters primarily to the group of minors sixteen years of age. If a sixteen-year-old minor, who has not completed a four-year secondary course of instruction, is employed, he is required, in communities subject to the law, to attend the continuation school for not less than four nor more than eight hours a week. The State Education Department recommends that boards of education provide part-time instruction for the minors seventeen years of age who are not employed and who are not attending full-time day public, private, or parochial school, unless such minors have completed a four-year secondary course of instruction, but it does not recommend attendance at this time for those in this group who are employed.

<sup>5</sup> *Report of Division of Vocational and Extension Education for the Year Ending June 30, 1926*, p. 141.

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The Education Law requires attendance at part-time school for not less than twenty hours a week by minors sixteen years of age who are unemployed and who are eligible for a standard employment certificate and who have been permitted to attend part-time schools. It is possible for certain sixteen-year-old minors who are not classified as employables to be excluded from this requirement.

Even before the present age requirements were made effective, attendance in these classes was undergoing a change. Enrollments rose rapidly until 1927-28, when 168,405 pupils were enrolled. They have declined since then, with the exception of a slight increase from 1935 to 1936. In this latter school year there were 55,940 enrolled in continuation work. The number of communities offering this type of education has declined since 1921-22, when ninety-nine centers had programs partly financed from federal funds. In contrast, only thirty-four communities were giving this type of instruction in 1935-36. The bulk of part-time continuation education has been given in New York City. Although New York City's percentage has declined since 1932, it still represents approximately three-fourths of all enrollees in the State.

At the peak of enrollments, the Assistant Commissioner of Vocational and Extension Education realized that this type of instruction was undergoing a change, and in his 1929 report says that "probably the part-time schools in nearly all of our cities have attained their maximum size."<sup>6</sup> As one reason for this he cited the decline in juvenile employment, which, of course, was even more prevalent later during the depression.<sup>7</sup> Furthermore, the increasing tendency to remain

<sup>6</sup> *Report of Division of Vocational and Extension Education, for the year ending June 30, 1929*, p. 139.

<sup>7</sup> The maximum number of employment certificates issued in the State during the last fifteen years was for the year 1925-26, when 97,164 were granted. From then until 1933-34 the number declined to 31,893. During the next two school years there was an increase in certificates issued, with 41,323 granted in 1935-36.

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in school and the various legal restrictions on employment of minors have contributed to the decline in attendance. If minors sixteen years of age continue to find it difficult to obtain work, then attendance for at least twenty hours a week will change the nature of the instruction offered. Undoubtedly the number of employed minors will increase with the return of more normal conditions, but the long-time trend will probably be toward higher industrial entrance requirements. In such a situation the problem of the continuation school will be mainly with the unemployed and not the employed minor.

As a matter of fact, many of the continuation schools have been giving more attention to this group which attends school for a longer period of time. In 1930-31 large numbers of unemployed youth were receiving more than the customary four hours of instruction in continuation schools. The increased demand for full-time vocational classes led many part-time schools, having space and teaching staff available, to offer one- and two-year industrial, commercial, and home-making courses to any boy or girl holding, or eligible to hold, a work permit. Such an arrangement appealed to pupils who could not meet the regular high school entrance requirement of eighth grade graduation.

Many of these continuation schools have evolved into what is practically a vocational high school. In fact, much of the increase in industrial high school enrollment can be attributed to conversion of continuation schools into vocational high schools. This tendency is noticeable in New York City, as is evident from the report of the New York City Vocational Survey Commission, which stated:

At that time [*i.e.*, November, 1931] the general unemployment situation made it less and less possible for children to obtain jobs, with the result that they stayed in full-time school, usually the senior high school. The continuation school population was therefore reduced from seventy thousand to forty-five thousand. Since these schools were equipped for vocational work

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and had trained teachers on their staffs, the Board of Superintendents authorized their use for full-time industrial high school pupils. The result of this move proved to be just what was expected. The pupils flocked into the continuation schools in such numbers that in October, 1932, there were six thousand of them, or nearly as many as there were in the industrial high schools themselves.<sup>8</sup>

A part of the rapid increase in full-time day vocational classes has probably been due to the attendance of those who formerly would have attended part-time classes. Undoubtedly as better employment conditions return some shifts will occur from the full-time to the part-time classes, but the growth of the former should, nevertheless, continue.

### PART-TIME COOPERATIVE CLASSES

Although the Education Law provides for the establishment of part-time cooperative classes by any city or school district which so desires, this form of vocational education has not been popular. In addition to the problem of placing high school pupils in cooperating concerns, the program is difficult to administer because of the constant changes in the employment situation. Although the trends in individual schools have varied, the total number enrolled in part-time cooperative classes reached a peak in 1932-33 with 3,069 enrolled, and declined in the subsequent years. In 1935-36 there were 2,404 enrolled in such courses. Owing largely to employment conditions and the codes of the National Recovery Act, employers were reluctant during the existence of the N.R.A. to hire many workers under eighteen years of age. In addition, minimum wage requirements demanded higher wages than had formerly been paid to cooperative students. Hence employers found it more profitable to hire older workers, who could meet the higher standards of productivity required. Furthermore, the large number of unemployed high school graduates who were willing to accept the type of jobs formerly filled by pupils sixteen and seventeen years of age was re-

<sup>8</sup> *Vocational Education and Guidance in New York City*, 1932 edition, p. 24.

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ported as an important factor in the last few years in reducing the number of jobs available for the cooperative pupil.

The problem of cooperative relations with business groups perplexes business teachers in New York State just as it perplexes teachers in other areas. In some parts of the State, retail cooperative courses are already partially in effect, but the experience has been too short to warrant a conclusion as to the educational or economic merit or defects of this type of training. Anticipated developments in the retail field, due to the George-Deen Act, will undoubtedly give impetus to the cooperative form of education. In other business fields, cooperative courses or internships in business are for the most part not practiced.

One of the most serious difficulties encountered in cooperative work in the field of business, at least so it is reported by department heads and business teachers, is that the businessman is uncertain as to what type of trained worker he wants. His judgment as to the adequacy of the school training program is likely to be conditioned by the peculiar demands of his particular business.

At the present time, to be admitted to cooperative courses the pupil must be a worker over sixteen years of age who has entered employment. The pupils are required to spend as much time in employment as in school classes, which must be held at least fifteen hours a week. The course of study must provide for a minimum of one half of the school time in the distributive occupational subjects.

### APPRENTICESHIP TRAINING

Instruction for the training of apprentices has been provided by a number of school districts ever since the first New York law pertaining to vocational schools was enacted in 1908. These classes are offered in the day or evening from four to eight hours a week and provide instruction supplementary to the practical training received on the job.

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In 1935-36, 7,262 apprentices were registered in evening apprenticeship classes in twelve cities, with 5,684, or 78.3 per cent, of the number enrolled in New York City. The city with the second largest enrollment was Buffalo, with 1,040 pupils. In other words, only 538 apprentices were receiving related instruction in evening classes outside of these two cities.<sup>9</sup>

Apprentices from forty-three trades and occupations were represented in 1935-36. Those in the printing trades constituted 15.9 per cent of the total number in evening classes. Apprentices in automobile mechanics were second and electrical trades third. Machinist trades and dressmaking ranked next.

The apprenticeship classes in certain communities were investigated in some detail by members of the Inquiry staff. In one community a technical high school and the General Electric Company have apparently worked out a satisfactory apprenticeship program. Practical work is given by the Company, while the school provides instruction in related subjects. This work is given in the late afternoon. During the semester from February 15, 1937, to April 24, 1937, 161 apprentices were registered in these classes and earned a total of 7,981 credit hours toward their apprenticeship with the Company.

State aid, although granted for pupils attending day apprentice classes, is not given for evening classes. Federal aid is granted for both day and evening classes.

In 1935 the Education Law was amended to provide for an Advisory Council on Apprentice Training whose duty is "to cooperate with the industries and public agencies of the State in the development of needed forms of apprentice training." In the spring of 1937 this Council reported to the Board

<sup>9</sup> It has proved inadvisable to present statistics on the number of apprentices for previous years because of the probable unreliability of some of the figures. This is partly due to the fact that members of the staff of the Vocational and Extension Division have been burdened during recent years with the general control of the adult education classes sponsored by the Federal Emergency Relief Administration, and as a consequence statistics on apprenticeship were partly based in certain years on estimates.

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of Regents that there was urgent need for the development in New York State of a comprehensive program of apprentice training for many of the skilled trades and industrial occupations. The Council contemplates a further report containing its recommendations as to new policies, rules, and regulations for apprentice training.

Since 1934 the federal government, through a Federal Committee on Apprentice Training, has also been actively interested in promoting this type of education.

National and state interest in apprenticeship has been heightened by the claim of shortages of skilled workers in certain trades and the curtailment of training programs during the depression, especially those dealing with apprentices. One difficulty of relying solely on employer apprenticeship plans is that during periods of surplus labor such programs are subject to elimination or curtailment. This is partly due to the indenturing of an apprentice to an individual employer, who finds it impossible to provide work for the apprentice although he has agreed to keep him employed. If apprentices were indentured to a group of employers, this difficulty might to some extent be overcome. Tied to the fortunes of an individual employer an apprentice scheme is geared to a short-run outlook, whereas it is essentially a long-run problem and should be organized on that basis.

### TRADE EXTENSION

The adult vocational program in New York State is perhaps the weakest link in the educational chain of vocational offerings which were observed. Generally speaking, New York has been most generous with its subsidies for day education, but the same cannot be said for evening vocational classes. Although federal aid is granted for such instructions, no state aid is given.

The enrollment in 1935-36 in evening trade extension classes for journeymen who are employed in a trade or industrial occupation was only 7,289 in thirteen cities. Outside

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of New York City, Buffalo, and Rochester, the number enrolled was negligible. These three cities had enrollments of 5,763, 683, and 430 respectively, or a combined total equal to 94.3 per cent of the enrollment in the State. Dressmaking seemed to have the largest numerical representation, or 16 per cent of the total. Electrical trades were second, followed by the machine trade, automobile mechanics, power machine operation, and beauty culture, in the order given.

The total enrollment in the State is in sharp contrast to the 56,497 enrolled in trade and industrial high schools, the 13,520 in technical high schools, and the 55,940 in compulsory part-time continuation schools. These enrollments present a disproportionate picture favoring vocational day school education. The policy of no state aid for evening trade extension classes is undoubtedly responsible for this unbalanced program.

The situation with regard to a trade extension education seems to have been accepted with complacency by local school administrators. No evidence of any concerted demand for extra subsidy for trade extension, or for apprentice work, was obtained by members of the Inquiry staff.

As has been mentioned earlier, these classes are open only "to pupils who are regularly and lawfully employed," which means that they are restricted to trade improvement work. Adult trade preparatory classes, essential in an economic system where new occupations are constantly arising, are not provided for in the evening trade extension program.

## Part II

### Recommendations



## CHAPTER VII

### General Summary of Recommendations<sup>1</sup>

*A. For Whom Should the State Provide Vocational Education on the Secondary Level<sup>2</sup> and Upon What Basis Should Pupils Be Admitted?*

Three groups of pupils, differentiated on the basis of grade accomplishment, should be provided with the opportunity of receiving training in the field of vocational education. These three groups will be designated in this report as Level I, Level II, and Level III. Level I includes pupils through grade 9; Level II includes pupils from grades 10 through 12, whose full-time schooling will presumably end with the secondary school period; Level III includes persons who have successfully completed a secondary school course through grade 12 and those who have demonstrated their vocational competence under adult working conditions.

#### PUPILS TO BE SERVED—LEVEL I

Before the student finishes grade 9 the secondary school should provide an opportunity for him to explore the training required for each of the major vocational fields represented in the secondary school program.<sup>3</sup> For pupils whose subsequent education is to be along academic or professional lines, these introductory survey courses should be of value in developing a general understanding of important kinds of educational and

<sup>1</sup> Subsequent chapters will discuss in detail the basic recommendations of this chapter.

<sup>2</sup> "Secondary level" here means grades seven through twelve and such post-graduate grades of less than college level as are deemed necessary to develop the program outlined in this report.

<sup>3</sup> In this report program means a group of curricula or courses.

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vocational activity. For pupils whose full-time school career will end with the high school, these courses should lead to an intelligent choice of a major vocation for which the individual pupil should seek definite training.

### *Present Admission Policies to Vocational Courses*

At the present time one of the disturbing problems concerning the various vocational fields is the absence of an adequate admissions policy. The vocational industrial and vocational technical courses have on the whole as good admission policies as any group, but all fall short of desirable standards. Virtually no scientific methods are used in selecting students for the commercial field, where it is estimated by commercial teachers in some New York schools that as high as 50 per cent of the students enrolled are naturally unfitted for the work. In some industrial high schools, particularly in New York City, tryout courses are given in the ninth grade, while in certain other communities the pupil is admitted to industrial courses in senior high schools without such experience, and he is required to give only meager information about himself.

### *Pupil's Need for Assistance*

In order to aid the pupil in making a wise selection the school, in addition to offering introductory survey courses, should establish under competent supervision a testing program which will reveal the native and acquired characteristics of the pupil. The school should use a scientific basis of selection rather than merely rely on the pupil's desire, which by itself is an inadequate guide. From the day the pupil enters to the day he leaves, he should receive the advice and assistance of someone in the school who has the ability to aid him. Adequate records of each student should be maintained, containing among other things information regarding test results, health and activity information, subject marks, data gathered from interviews, and program and personal adjustment problems.

## *General Summary of Recommendations*

### PUPILS TO BE SERVED—LEVEL II

For every pupil whose full-time schooling is to end within the secondary school period, the secondary school should provide vocational education leading toward initial vocational competence. Admission to specific initial vocational courses should be restricted to those pupils who have shown an aptitude and interest in the training which such courses provide during the introductory survey courses, but the *total* program should make provisions for *all* who intend to terminate their full-time schooling with the secondary school.

#### *Importance of the Problem of Vocational Adjustment*

The analysis of the available social and economic data, the results of the interview, leaving pupil and test studies, and the existing total offerings of the secondary schools in the State show clearly that it is unquestionably desirable to pay more attention to the problem of the vocational adjustment of secondary school pupils.

In 1936 there were 4,700,000 young persons in the United States between the age of sixteen and twenty-five who were unemployed, out of school, and seeking work. According to the Welfare Council of New York City, there were 390,000 such young people in that City. During recent years it has been difficult for young people to find employment because of the depression, but the changing policies of industry and business regarding desirable hiring ages has been a more fundamental reason for their unemployment. One of the most significant trends among the employed population in the last two decades has been the constant decrease in the proportion of children from ten through fifteen years of age who have been gainfully employed. There has also been a comparable decline in the proportion of those fifteen to twenty years of age who were gainfully employed, but the extent of the decline has not been so great as with the former group. In addition to the hiring

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policies of employers, higher standards of living among the people and a greater concern for the education of the young have had their influence on the employment of young people.

Secondary school education is not today primarily concerned with the preparation for entrance into higher institutions. From 150,000 to 200,000 pupils in secondary schools of the State annually terminate their full-time education with these schools. Many such pupils seek employment, but an examination of the school offerings in the State shows that thousands of pupils in general high school courses graduate (or in many cases simply leave school) without being trained adequately to meet the problem of finding and holding a job, even when one is available. Thousands more have been graduated from the commercial courses, but as far as could be determined, less than 30 per cent of such graduates have been employed in jobs involving skills in which they were trained. The vocational industrial schools made a better showing in this respect, but even in this group only 63 per cent of the 1936 graduates were holding jobs for which they had received training in school.

Vocational adjustment is not the problem of only a few of the secondary school pupils when they leave school. By one means or another, virtually the whole of this group must become occupationally adjusted. At the present time, the main source of help for these pupils is their own initiative. But the history of what happens to many of them is clear evidence that self-reliance is not sufficient when the training has been inadequate. To rely on children to find their own callings results in tragic cost. The problem is a social as well as an individual one and the State must be concerned with it.

### *State Responsibility*

Because the State has already assumed the obligation for the initial education of youth, presumably to help him meet the problems of life, the schools must also assume their share of this responsibility in aiding youth to become initially adjusted

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to economic activity. The problem of vocational adjustment cannot be relegated to certain schools or to special departments of a secondary school, but must be a major obligation of all secondary schools to all pupils until they are initially adjusted or until, say, they are nineteen years of age.

The assumption of this obligation, however, calls for a fundamental revision of the secondary school curriculum. The educational system should be, to use an oft-repeated phrase, for "all the children of all the people," but equal opportunity for all does not mean the same opportunity for all. On the contrary, it should mean that every child should have the opportunity to pursue that type of education which will best advance his own welfare in ways consistent with the welfare of society. This is democratic education.

If, therefore, the problem of initial vocational adjustment is to be the concern of the educational system, an appropriate training to meet this problem should be made a definite part of the secondary school program and not merely appended to it. Furthermore, this program should be inclusive, dynamic, realistic, adequate, effective, socially desirable, and socially economical.

### PUPILS TO BE SERVED—LEVEL III

Vocational institutes and technical institutes should be provided as a part of the total program of secondary education for the purpose of giving advanced vocational and technical training.

#### *The Vocational Institute Pupils*

The work of the vocational institute represents a continuation of the school's interest in the problem of vocational adjustment. Of all the vocational offerings in the State at the present time, the adult program is probably the most inadequate. In 1935-36, the total number enrolled in evening trade extension classes was only 7,289, a number equal to about 13 per cent of the all-day industrial enrollment. The adult pro-

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gram in vocational agriculture is also inadequate. Clearly, more attention should be given to the problems of those who are becoming adjusted to their work. In many cases a beginning worker soon finds that additional training would be advantageous. The institute can give him this training. His experience has given him a specific objective in taking such courses, and his outlook, motivation, and point of view represent a maturity not found among most pupils in grades 10 through 12. Hence, it would be inadvisable to mix such students with those in grades 10 through 12.

Admission to vocational institute courses should be restricted to persons (irrespective of their chronological ages or educational background) who have demonstrated their vocational competence under adult working conditions. Success in initial vocational school training should not be accepted as a substitute for this requirement.

### *The Technical Institute Pupils*

Technical institutes offering a two-year terminal technical education course in grades 13 and 14 would seem to be justified in view of the needs for such trainees and of the lack of existing semitechnical educational facilities. The National Society for the Promotion of Engineering Education has estimated that there is an acute shortage of technical assistants in industry. Yet, comparatively few educational institutions in the State have attempted to meet this need.

Within the twelfth grade it is practically impossible to give adequate technical courses unless the school practices a highly selective admissions policy, and even then it must drop many students before the completion of the course. As has been mentioned before, dropouts are numerous in technical courses. Satisfactory technical education should require work through the fourteenth year. Some pretechnical institute work of a general nature, however, might start in the eleventh or twelfth year.

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Admission to technical institute courses should be restricted to students who have successfully completed a secondary school program extending through grade 12, and who show a definite aptitude for semiprofessional training. Work experience is not required for this type of course since it is not concerned primarily with mastering manipulative skills, but rather with fundamental understandings.

*B. How Far Should Vocational Education on the Secondary Level Be Carried? Specifically, What Should Be the Major Objectives insofar as Furthering the Vocational Adjustment of Pupils Is Concerned, How Much Training in Skills Should Be Involved, and How Far Should the Program Include Placement?*

### OBJECTIVES OF PROGRAM—LEVEL I

Introductory survey courses should acquaint pupils with the major vocational opportunities and requirements of important occupational fields, and should help each pupil analyze his own interests and abilities in relation to the learnings involved. Each pupil should have a sufficiently wide range of such experiences to insure an intelligent choice when he must decide on his future educational career. These courses should not attempt to develop vocational skills, but should give the student the opportunity to orient himself and to explore the training required in the various fields of activity. These courses should be devoted to a round of nonvocational experiences in different fields, and be planned to bring out latent interests and abilities which will help the pupil in making a wise selection of courses, thereby reducing the present high mortality and consequent waste found in some schools.

### OBJECTIVES OF PROGRAM—LEVEL II

The purpose of the initial vocational courses, planned for those pupils whose full-time schooling is to end within the secondary school period, should be to help each pupil (1) to

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develop such habits and attitudes as will lead him to work cooperatively and happily with others in whatever general field of vocational activity he has chosen; (2) to acquaint himself with these major vocational processes in the particular field which will make him an apt learner on the job, and will enable him to adjust himself to varying requirements; (3) to gain a knowledge of the conditions of work, wages paid, opportunities for advancement, and such other information regarding an occupation as may be necessary in order to enable him to make an intelligent beginning as a worker; (4) to gain knowledge of the kind of training necessary for advancement in the field, and of where and how to obtain that training; and (5) to secure training in basic elementary skills and to secure sufficient training in specialized skills to provide him with the marketable ability necessary to obtain a beginning job.

The secondary school should provide a vocational education which will enable the pupil to get and hold a job in a vocational field broad enough to give reasonable assurance of opportunity for self-support and for vocational advancement to the limit of the pupil's potential ability. The training may be in semiskilled or in skilled fields, providing it has wide applicability. In industrial education, for example, training in the electrical fields, machine shop practice, and automobile mechanics might be offered.

Among boys and girls who have not yet had successful vocational experience under adult working conditions, the secondary school should not seek to develop a higher degree of specialized vocational skill than the minimum needed to get and to hold such jobs as normally may be open locally to beginners in their chosen field. For example, the secondary school should not train vocationally inexperienced pupils to be specialists in electric welding, though it may train them as electricians' helpers; nor should it seek to train such pupils to be cafeteria or tearoom managers, though it may train them

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for counter-service or as waitresses; nor should it try to make them specialists in horticulture, though it may make them sufficiently competent to support themselves as general agricultural workers; nor should it attempt to train them as stenographers, though it may train them as routine typists; nor should it train them to be costume designers, though it may prepare them to be power-machine operators.

Classes organized for the purpose of developing marketable and saleable skills should be given as near as possible to the time when the pupil is to leave school. This work could be given during the pupil's final year.<sup>4</sup> The amount of time devoted to such instruction will vary with the nature of the skill being taught and also with the pupil. A longer time may be required for dull pupils than for bright ones. Some pupils may require less than a year, and others, more than a year.

### *Desirable Work Habits*

Studies of the causes of discharge show the importance of desirable working habits and attitudes, such as responsibility, self-reliance, promptness, cooperation, and industriousness. These qualities are essential if the pupil is to become successfully adjusted to his work, and should be considered throughout the whole of the pupil's training period. In addition, he must be able to learn on the job, especially since he cannot acquire in his initial vocational education courses all of the training necessary for the job. Furthermore, if he moves to another occupation or if the nature of his work changes, he may find it necessary to acquire new skills.

### *Adaptability*

Although the total economy is characterized by basic processes and fundamental principles which are substantially unchanging, economic activity is nevertheless characterized by

<sup>4</sup> "Final year" is used rather than twelfth year since many pupils terminate their full-time education before the twelfth year.

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inevitable and continuous changes—changes in the kinds of work done and in the amount and character of skill required in a given occupation. Technological developments, changes in productivity, and shifting consumer wants and social mores gives rise to new methods of work and changes in old ones. As each industry, and hence as each job opportunity, expands or contracts, and as territorial and regional shifts in agriculture, business, and industry take place, the program dealing with vocational adjustment must consider the consequences of such changes. Changes in economic activity demand that the individual adjust and adapt himself to the new environment—hence, the more varied the basic training, the easier will be his adjustment. There seems to exist a high degree of horizontal mobility within occupational patterns, even higher than is found between occupational levels.

Hence, training in versatility should be a part of the initial vocational education course and it is also a reason for the existence of the vocational institute courses. The desirability of providing information concerning the kinds of training necessary for advancement on the job and a knowledge of where and how to obtain the desired training is obvious.

### *Basic Skills*

A wide range of elementary skills serviceable as a broad base for the pupil's initial adjustment seems desirable. At the present time most vocational industrial education is concerned with the preparation of young people for entrance into specific skilled and craft trades. But a program involving all those who expect to terminate their full-time schooling with the secondary school must be constructed on a broader base.

In order to take advantage of the motivating force of specific vocational fields, the schools could develop these basic skills through courses in these fields. The special vocational interests of the pupils should be utilized wherever possible.

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The function of the secondary school in grades 10 through 12 is not to develop full-fledged craftsmen. Indeed, certain vocational industrial courses in New York State are attempting to train at a level higher than is recognized by the trade. In several schools visited by the Inquiry staff, the graduates of one course started employment on the same level as those who had no previous experience, and there was no indication that the pupil who was more highly trained would be permitted to advance any faster on the job than the inexperienced beginner. The age of the student and the obligation of the school to give the student other training, for example, education for citizenship, prohibit training him for full-craftsmanship status. The school should restrict itself to giving the pupil an education which will enable him to carry his work as a beginner. This does not mean that he should not receive training in a specific type of work. On the contrary, since many employers seem to be interested in what a prospective employee can do, recommendation has been made that the pupil receive during his last year in high school some training leading toward the development of a marketable skill. This training would enable the pupil to offer some practical experience, even though it might be only the ability to operate a power machine, to file in an office, or to do simple operations around a farm, home, or garage.

#### OBJECTIVES OF PROGRAM—LEVEL III

The courses in the vocational and the technical institutes should be designed to furnish (1) "up-grading" vocational education for young people who have demonstrated initial competence in a general vocational field, and (2) preparation for vocations which require a more extended period of initial schooling than can be provided prior to the end of grade 12, but which demand less training than that offered by four-year institutions of higher education.

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The vocational institute is concerned with the first. Its courses should be planned to provide specialized vocational training of a type not readily obtainable through employment itself, leading to increased opportunity for advancement in the general field in which the student has first demonstrated his competence.<sup>5</sup> Specialized training in electrical welding, cafeteria or tearoom management, costume designing, horticulture, or stenography may properly be offered as a part of the program in vocational institutes, even though such training should not be open to the vocationally inexperienced pupil who is receiving his initial vocational education.

There is no need for the vocational institute to give upgrading work of a type that can readily be obtained through employment itself. It should, however, give instruction when such work is not otherwise available. As was previously pointed out, types of work change and, furthermore, employees cannot obtain all the needed training in grades 10 through 12. Members of the Inquiry staff were told that many of the pupils in certain trade extension classes were recent graduates of vocational classes. The vocational institute should serve this type of student. Youths with some work experience who wish to improve their position by acquiring further training along specific lines will be benefited far more by such training than is true at present in some vocational courses open to inexperienced young people, who may be pursuing a certain occupation because of the glamour surrounding it. Many pupils take, or seek to take, an aviation course, but, let us hope, not because they expect to become aviators.

Technical institute courses should be concerned with the preparation of students for beginning employment in occupations which fall between the skilled crafts and the highly scientific professions, such as laboratory assistant, the dental hygienist, the surveyor, the architectural assistant, and the

<sup>5</sup> F. W. Reeves, T. Fansler, C. O. Houle, *Adult Education*, Regents' Inquiry, 1938.

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dietician. The training of secretaries, as distinguished from that of routine typists or stenographers, should be put on a technical institute basis.

The technical institute can adequately train many persons who could not be so trained in grades 10 through 12. For example, it would seem improbable that secretaries, or junior engineers, or dieticians could be trained in those grades, but a satisfactory program could be worked out in such an institute, since the pupil has had a previous basic training and in addition is more mature.

#### FURTHER OBLIGATIONS OF THE SCHOOL

Not only should the secondary school assume the obligation of providing appropriate vocational training and of offering facilities which will aid the pupil in making desirable choices, but it should also be responsible for (1) certifying to the best of its knowledge that the pupil can initially adjust himself in his work and that he possesses the fundamental requisites for beginning his employment in a broad general field of activity; (2) aiding the pupil in becoming initially placed in his work; and (3) following the subsequent vocational activities of the pupil during at least the first eight months of his initial employment or until he is nineteen years of age. In assuming these responsibilities, the secondary school should cooperate with all other agencies which are capable of rendering assistance.

#### *Certification*

If the school professes to offer a service, it should be willing to stand back of its service in a specific and tangible way. Graduation should signify that the school has given its stamp of approval regarding the ability of the student to adjust himself initially to social and economic life. No school should graduate any student unless it is willing to certify that at the

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time of graduation the pupil has the qualifications necessary to become a socially and economically useful human being.

### *Placement*

If the school is to assume the obligation of training for initial adjustment, it must help to place the pupil in an occupation.

It seems advisable to mention again the extent to which the graduates of certain courses at the present time find employment in the occupation for which they were trained. The vocational industrial courses make a better showing than do the commercial courses. In 1936, 63 per cent of the vocational industrial high school graduates were placed in jobs for which they were trained, while, as near as could be determined, less than 30 per cent of the commercial graduates were so placed. The low percentage in the commercial field was partly due to the large number of graduates involved, while the high percentage in the industrial field was due as much to the relative insignificance of the number of such pupils, when compared with the number of workers, as to any well-planned program of adjustment to industrial needs. For example, the industrial schools reported only 3,122 graduates, of which 1,955 were placed in occupations for which they were trained. If this total is analyzed and compared with the working population in any given occupation, the numbers involved appear insignificant. The industrial courses should have a higher percentage of placements than the commercial courses.

Vocational schools believe that the placement of their graduates is an obligation of the school. Placement should also be the concern of any school where pupils terminate their full-time schooling with the secondary grades. The placement program in most nonvocational schools is either unsatisfactory or nonexistent, with the result that thousands of students are forced out onto the economic scene without adequate assistance in finding appropriate employment.

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At the present time the important thing is that the leaving pupils, both graduates and nongraduates, should be placed, not who is to place them. For this reason either the school system or the New York State Junior Employment Service, or the two combined, should provide placement facilities. Whatever plan is adopted, the school should be responsible for seeing that there is a plan. Unless the pupil is able to obtain a job and to become adjusted to his work, buildings, equipment, supplies, and teachers are of little avail.

The primary requirement, then, is that the school should make certain that the placement function is performed by someone and in the last analysis, if necessary, carry out the function itself, and not merely that the school or the state employment service should be responsible for placement of students. Either method has both advantages and disadvantages. At the present time it would not be advantageous to require all initial placement by the state junior employment service, since it does not operate widely, and is therefore not capable of assuming the responsibility for the entire State. Besides, some schools, mainly vocational, are now doing an excellent job at placement. Neither would it be advisable to require each school to make all initial placements, for satisfactory cooperative arrangements have been worked out between some schools and the service. Furthermore, many general high schools would not be capable under existing conditions of assuming the responsibility of actual placements. Moreover, in the near future, the service, owing to the passage of the Social Security Act, may be vastly extended and improved. It will then be able to assist the schools, or even to assume entire responsibility.

It would seem advisable for the Board of Regents to observe, say for a period of five years, the different placement methods, that is, the school plan, the employment service, or the joint arrangement. The Board should encourage local experimentation in order that it may have a sound factual basis upon which to make its final decision. After careful observation of the

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various possibilities, it could then establish a definite program. Such a plan of procedure would be consistent with the emphasis of this report, that local initiative and local responsibility should be encouraged. But at the present time the schools should be urged to become conscious of the problem of placing students and to take the responsibility for making a plan whereby placement is taken care of.

In times of scarcity of jobs, the secondary school, that is, a school dealing with pupils in grades 10 through 12, should assume primary responsibility for providing beginners with work opportunities in the school, similar to the opportunities which would normally be open to them. Work of this character—minor repairs on buildings and care of school grounds—has been done by certain secondary schools.

### *Follow-Up Work*

If the school is to see that pupils are initially adjusted, it should keep in touch with them at least during the first eight months of continuous employment or until they are nineteen years of age. Such follow-up work will have many advantages. From the data collected the school should be able to find out (1) if the pupil is adjusting successfully, (2) if the pupil's training is helping him to function satisfactorily on the job, (3) if the pupil needs additional training, (4) or if the school program needs revision. Each school system should be responsible either for making follow-up studies or else for cooperating with some other agency in making them. Each year teachers should be assigned a certain amount of the follow-up work in connection with this plan, because of the benefit they would receive from such contacts.

If within six months prior to the time a pupil will be nineteen years old, it is apparent that he will not hold a job within eight months, the school should notify the local social welfare department so that the organization can be prepared to help the student when the case reaches its hands.

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### *C. For What Types of Vocations Should Vocational Education Be Provided at the Secondary Level?*

#### NATURE OF COURSES

The introductory survey courses, offered to fulfill the Level I requirement, should be in the following general fields: (1) agriculture, (2) industrial, (3) homemaking and domestic and personal services, and (4) business occupations.

Initial vocational education courses (Level II) should be offered within each of the general vocational fields listed above. A course given on this level should not, and undoubtedly could not, cover the whole of any one of these fields. However, the work in any course should not be so narrow or so highly specialized that the pupil cannot use his training to advantage in more than one type of employment.

On Level III the advanced vocational and technical courses should be offered in any of the fields listed for Levels I and II. To illustrate, the vocational institute might give intensive courses in the business field; for example, junior accountancy, small-store management, or selling which involves knowledge of products and processes. Various types of apprenticeship training, as well as part-time cooperative work, could be given on the vocational institute level. In fact, the program offered by the vocational institute should be highly flexible and adaptable to individual needs, varying from short unit courses to longer ones and given in the day or in the evening. The technical institute could give semiprofessional training of a technical character in any of the broad fields listed for Level II. For example, it could train junior engineers, secretaries, dieticians, or costume designers.

#### *Breadth and Flexibility*

The total program should be characterized by breadth and flexibility. It should be sufficiently broad so that education for vocational adjustment will be appropriate to each pupil's

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abilities and needs. There should be a place for those who will enter semiskilled and even unskilled occupations, as well as for those who seek entrance into skilled occupations. This does not mean that specific training in all occupations should be offered on Level II, but that different groups of pupils should be given an appropriate education, one that will enable them to adjust as easily and as quickly as possible to economic life.

At the present time, as we have seen, vocational industrial education is primarily concerned with training for skilled crafts and trades, which both narrows the possible fields of training and introduces inflexibility into the program.

By restricting vocational training largely to intensive skilled training, many pupils are denied vocational education. It would be more consistent with democratic principles if initial vocational training on Level II were provided for all potential workers to the end that all citizens might work and find happiness to the limit of their capacity. This plan would also be consistent with the demands of the modern economy, which embraces all types of skilled requirements. To neglect altogether the large group that does not require highly skilled pre-employment training, but who nevertheless would benefit from some vocational education, is unwise, unreal and inconsistent with the facts.

Furthermore, unless a wise local administration with a broad philosophy of education can develop breadth in its program, the champions of any one form of vocational training may, by innuendo and false guidance, prevent the wholesome development of a broad program. This has already happened in certain communities in New York State.

Flexibility, in addition to breadth, is also essential, if the program is to remain in tune with economic life. Flexibility in course offerings, in the content of courses, in requirements of one kind or another, is fundamental if we wish to meet our primary objective of successful initial vocational adjustment.

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At the present time inflexibility characterizes some courses, particularly those in the commercial field.

### *Local Program*

No new fields on Levels II and III should be introduced with state aid until the local school has complied with the requirement of the State Education Department that it submit evidence of necessary preliminary planning. As long as the program and the supporting evidence is properly presented in the *form* specified by the Department, the local school should not be deprived of state aid. It is important that the local school administrators think through their problems and make adequate investigations.

Job analyses are a logical first step in the establishment of any new course. Without such basic data it is inconceivable that an appropriate program can be developed or continued successfully. The teaching of some subjects may remain static, but not such courses as are considered in this study. For this reason, it is undesirable to standardize courses. No standard pattern could take care of local differences and needs, yet today the commercial courses are practically the same in all communities in New York State. On the other hand, vocational agriculture does gear its course content to local conditions, as do certain vocational industrial courses.

The analysis in Part I of this study showed the necessity for more adequate factual material concerning desirable courses. It also showed the lack of such data in virtually all the major fields discussed. As far as could be determined, no community in the State made continuous surveys of local needs. Such investigations are especially important if the number of pupils pursuing this type of instruction is to increase.

### *Basic Principles*

Local school systems should seriously consider the advisability of establishing a basic social philosophy regarding

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desirable offerings. Such criteria as "first come, first served," or the articulateness of certain interested groups should not be the basis for establishing courses. Neither should the basis be success in placements of graduates, since all pupils taking a socially undesirable course might be placed; nor should the basis be training for a monopoly occupation or an occupation in which artificial barriers make it extremely difficult for the pupil to enter, such as was obviously true in certain trades where unions either maintained rigid entrance requirements or failed to give due recognition to the work done in the school.

### *Advisory Councils*

If local school districts are to develop a variety of courses they should avail themselves of every opportunity to secure assistance from those agencies and persons in the community who are conversant with local conditions. One of the most effective means of utilizing local experience is to create advisory boards of vocational training.

School districts are urged to create such advisory boards, if none are in existence at present. Such boards can help school administrators on such matters as the introduction, elimination, or major revisions of courses, the planning of buildings, or the purchasing of appropriate equipment. Such boards are indispensable in developing apprenticeship courses and in encouraging young persons in industry to pursue upgrading work. Where vocational industrial schools have at the present time active advisory boards, the schools have benefited immensely. The character of the work being done in such schools, the nature of the equipment, and the timelessness of the programs, demonstrated conclusively the effectiveness of the advisory board as a medium for providing community cooperation. Of all the means used in making community contacts the Inquiry staff was impressed most with the advisory board.

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Each local school district should also consider the advisability of establishing, through its board of education, an advisory board of social and vocational adjustment. Such a board, made up of representatives of local agencies who are concerned with the adjustment process, would enable all qualified community agencies to contribute the richness of their experience to the problem of successful vocational adjustment.

### *D. In What Types of Schools Should Vocational Education Be Provided at the Secondary Level?*

#### SCHOOLS OFFERING VOCATIONAL EDUCATION

Training in the three levels discussed in this report cannot be the exclusive concern of any one type of school. It will be necessary to utilize different types, depending on the purpose of the course and the size of the community.

Introductory survey courses should be available to all pupils in grades 7, 8, and 9 in the State, and wherever possible should be offered by each school having these grades.

#### *Initial Vocational Education*

Courses in initial vocational education should be available to all pupils in grades 10 through 12 and may appropriately be given in cosmopolitan high schools, since this training constitutes an integral part of the secondary program. It should not be construed as a distinct and separate type of education to be relegated to special schools, with the result that thousands of pupils are denied such training.

The class work, organized for the purpose of developing marketable skills and taken during the pupil's final year, may be given in the cosmopolitan high school or in cooperation with other schools, perhaps the vocational institute. If possible, these courses should be offered in the cosmopolitan high school since they bear a close relation to the work given in the previous grades. The alternative may be advisable

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if the nature of the equipment is such that it would be more economical to concentrate it in a few schools. Under such a plan a wide variety of equipment might be made available at a financial saving to the schools. Besides eliminating the unnecessary duplication of expensive equipment, greater utilization of the equipment might be secured, thus reducing per-pupil equipment cost. As a matter of fact, some of the class work might be done on the job itself, for example, in industry or business. In a few cases, part-time cooperative arrangements might be developed which would provide the pupil with the desired experience. Under such circumstances the pupil should be credited with the work done on the job. In fact, an arrangement of this character might serve very well to articulate the work done in school with the subsequent adjustment of the pupil on the job. The transition would be less abrupt than it is at present for many students.

The favorable and unfavorable effects of the segregation characteristic of the present program of vocational education were examined by the Inquiry staff. Where there are separate schools, the fundamental shortcoming is the mutual disesteem among both vocational and nonvocational educators. Often in the past the separation of vocational and general education has merely intensified the academic tradition and made both groups more conscious of the separation. Rather than encourage the development of a unified system of education, obligated to serve the needs of all types of children, the separation has made vocational education an entity in itself. The time has come when initial vocational training should be made an integral part of the general educational system. To the Inquiry staff it seems necessary that kindred subjects, whenever and wherever taught, be under the general supervision of one administrative head. If this plan is put into effect, many of the apparent distrusts of the vocational educator concerning work in the general high schools would be minimized, and the educational program better integrated.

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### *Institute Courses*

In the case of large school systems, vocational institute and technical institute courses may be more effectively developed in separate schools than in cosmopolitan high schools. Among small school systems, however, these courses may properly be developed either as an addition to the comprehensive program of the general high school, or else in separate schools organized for the purpose of serving a number of individual school districts.

Wherever feasible, separate schools are suggested for vocational institutes and technical institutes. Although there will be some overlapping in the ages of institute pupils and pupils in grades 10 through 12, the former will on the whole be more mature students. For this reason, separate schools would seem desirable. There is a better justification, perhaps, for segregating the pupils in vocational institutes than for segregating those in technical institutes, for the former are required to have had work experience while the latter are not. In both vocational institutes and technical institutes, however, there will be found fewer pupils than in grades 10 through 12, hence fewer institutes will be needed and economical advantages may dictate separate schools.

### *Present Inequalities of Opportunity*

At present there is a great inequality of opportunity for pupils to pursue certain types of vocational education, particularly industrial and technical education. As one person stated, "The only way some boys in the State can receive industrial education is to be sent to a reformatory." Approximately 90 per cent of the boys in industrial and technical education are enrolled in classes in New York City and Buffalo. Furthermore, nonresident pupils are seldom found in these fields. Three groups are virtually prohibited from receiving instruction in these fields—rural youth, young persons in small communities, and young persons in certain political sub-

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divisions bordering on concentrated industrial areas, the latter an increasingly important element in view of the migration of New York's population to the suburbs. Vocational training should be available to these groups.

### *Regional Schools*

It would probably be economically impossible for many small communities to offer vocational institute and technical institute courses in separate schools in each school district. For this reason the plan of using separate schools to serve a group of districts is suggested. From a state-wide point of view concerning social needs, the time-honored method of developing vocational education programs through local school boards, giving rise to certain shortcomings and gaps in most state programs, is a slow and laborious provincial process. This situation might be changed if a group of school districts developed a program cooperatively. Certain communities in the State have already expressed an interest in such a project. The State should amend the Education Law to permit such schools to serve more than one school district. The area to be served, however, should not be confined merely to a county, which at present is not an administrative unit for general educational purposes. It is a political and not a social or economic area.

Even though vocational institute and technical institute courses are developed in other than the largest cities, the better plan might be to offer them as an addition to the program of a comprehensive high school in the smaller communities, rather than in separate schools. The vocational staff of the Regents' Inquiry found that separate vocational schools were less successful in smaller cities than in larger ones. It would seem that for any area of less than 50,000 population, the comprehensive high school should be utilized. The regional school then might well be a department of an existing high school. If the plan of using a department rather than of developing a separate

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school is accepted, it should be possible for New York State to expand the program in smaller communities considerably.

*E. What General Role Should the State Education Department Play in the Development of the Suggested Program?*

#### ROLE OF STATE EDUCATION DEPARTMENT

In order that the program, briefly outlined in the preceding pages, may be most effectively realized, the State Education Department should (1) conduct research, (2) render a variety of services to local school districts, (3) approve school facilities, (4) grant financial aid, (5) develop an adequate teacher training program, (6) maintain cooperative relations with various state departments and other agencies, (7) secure the modification of the existing compulsory part-time continuation law, and (8) discontinue the Regents' Examinations in all types of vocational or quasi-vocational courses.

#### *Research*

Research should be one of the primary functions of the State Education Department, which should conduct surveys of the longtime needs of vocational training in the State. It should make continuous studies of occupational demands, both with regard to the human abilities and characteristics needed and with respect to the changing nature of occupations due to technological developments. The Department should estimate the ability of the State to absorb the pupils leaving schools from different courses. This will aid the localities in devising a program which will be in accord with economic and social trends. Such research is necessary if the initial vocational training program is to be realistic.

Job analysis and job specification are prerequisites for scientific selection of the pupil and the accurate determination of course content. Hence, the Department should endeavor to make available to local schools scientific job analysis studies.

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The Department should conduct research in admissions so that local school districts may utilize the most modern means possible in selecting students for different courses, and thus avoid the tremendous amount of social waste found at the present time.

The Department should also endeavor to determine the best tests of individual accomplishment for the local schools to use in judging the effectiveness of existing methods of instruction and as a means of checking the extent to which the school is accomplishing its objective of training for vocational adjustment.

The Department should collect accurate statistics on such matters as the number of pupils being trained in each type of course and the number leaving each course.

One important part of the research activity of the State Education Department should be the continuous appraisal of the educational program in the State. It should make studies of the effectiveness of testing programs, admission policies, the extent to which pupils are becoming adjusted, and follow-up surveys of leaving pupils. Such studies should be conducted to find out the extent to which various schools are reaching their objectives and to enable the Department to assist localities in regard to methods of improving and evaluating their programs. Complete annual surveys of entire programs would be out of the question, but certain aspects of the program in certain localities should be investigated each year. The results of these studies should be sent to the schools and used as a basis for desirable changes.

### *Services to Local Schools*

The State Education Department should assist, but not dictate to, local schools concerning such matters as the nature of courses to be offered and the content of courses. It should assist school districts which are planning to make local surveys of the needs for vocational training, and hence develop

### *General Summary of Recommendations*

appropriate plans (1) by supplying information as to how such investigations should be conducted, (2) by distributing the results of such studies, and (3) by lending the services of state officials for the guidance of these local investigations. The communities themselves should be the ones to actually execute the surveys. The Department could develop a general outline, a plan of procedure, and sample forms and questionnaires which localities might use. Local districts should be strongly urged, but not required, to make continuous surveys to find out if their objectives are being met. Local districts, of course, should be required to make surveys at the time new courses are introduced on Levels II and III.

The service function of the Education Department should go hand in hand with the research function, and each should supplement the other. State officials should give advice, based on factual evidence, while departmental research can be guided by the experience of those state officials who are actively in the field.

#### *Approval of School Facilities*

Each local school district should be permitted to determine its own program in the light of its ability to attain its objective. The State Education Department should merely require that the district provide desirable buildings, equipment, supplies, adequate teaching, and administrative facilities, in accordance with established minimum standards, and that necessary reports of its activities be sent to the Department. A state-prescribed course of study is of little use if there are not, to take merely one of these factors, sufficient supplies. All too frequently, vocational classes visited by members of the Inquiry staff possessed either inadequate, antiquated equipment or insufficient supplies, or both.

The Department should establish appropriate rules and regulations regarding the essentials of the program mentioned above, and these rules and regulations should be rigidly

## *Education for Work*

enforced to the extent of depriving local communities of state aid when in the judgment of the Board of Regents those rules and regulations have been violated.

### *State Aid*

State aid for any approved public secondary school should be granted upon the basis of the chronological age of the pupil and should, of course, be proportionate to the amount of instruction provided, but appropriate aid should be granted irrespective of whether the course is given full-time or part-time, or in the day or in the evening. The time when the course is given is immaterial. The primary thing is education itself, not whether it is gained during daylight or at night. As we have seen, one of the reasons for the underdevelopment of evening trade extension classes is probably the absence of state aid for this type of instruction.

As has been indicated, a local school district should be deprived of state aid if it does not maintain the essentials of a program, such things, for example, as desirable buildings, equipment and supplies. It should not, however, be deprived of state aid because of the type of the program itself, which should be the province of the local school district.

No new fields should be introduced with state aid until the local school district has submitted a program in a form specified by the State Education Department and the program has been accepted by the Department as evidence of necessary preliminary planning. This is not saying that the program must be *approved* by the State Education Department, but merely that the evidence is in accordance with the form required.

Furthermore, the State Education Department should have the power, after due notice has been given, to call for an outline of the program in any specified field, and to withdraw state aid if the program is not submitted in such form as gives evidence of necessary planning.

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### *Teacher Training*

In order that schools may operate most effectively, the State Education Department must encourage in every possible way the development of an adequate teacher training program for teachers dealing with the problem of vocational adjustment.<sup>6</sup>

### *Cooperative Relations*

The State Education Department should maintain co-operative relations with other agencies that can assist in any way toward the realization of the objectives of the program. Such agencies as the State Department of Labor, the Department of Agriculture and Markets, and the Department of Social Welfare could render invaluable assistance to the Education Department in the accumulation of necessary data and, in some cases, in rendering effective services. For example, the Department might develop a cooperative plan for placement and follow-up with the State Junior Employment Service. The Division of Unemployment Insurance is accumulating extremely valuable data on employment trends and job opportunities, which should prove helpful to the Education Department.

The State Education Department should cooperate with the Labor Department in seeing that appropriate labor standards are maintained in apprenticeship programs. As a matter of fact, the Labor Department should be consulted concerning the effect of school programs on labor standards in general.

### *Compulsory Part-Time Continuation Law*

There does not seem to be any reason why, at the present time at least, the full-time compulsory school attendance age should be changed. However, certain changes in the law

<sup>6</sup> The reader is referred to Chapter XII for a detailed discussion of the recommendations, since space in this summary chapter does not permit sufficient discussion of them.

## *Education for Work*

concerning school attendance for those who have reached sixteen years of age appear advisable. The present continuation school law was conceived when boys and girls left school at fourteen and fifteen years of age, not sixteen and seventeen years of age. A different situation needs to be faced today.

The present compulsory part-time continuation law should be repealed in favor of a law which will provide a wider range of educational opportunities for those who have reached sixteen years of age and which will serve more adequately the needs of such young persons. The new law should be in line with the following proposal: Sixteen- and seventeen-year-old minors who have not completed a secondary school education through grade 12, who are not employed, or are employed only part time, and who are not attending a full-time day educational school, should be required to pursue such educational experience as the local school district may determine. As long as the pupil is fully employed he should be excused from such a requirement, but he should not be deprived of using the facilities which the school has to offer if he so desires. Furthermore, he should be urged to use them.

The recommendation does not say that these minors must necessarily return to school—merely that they must pursue such educational experience as the local community may determine. The locality is to be the judge of what it shall require.

This report has stressed the responsibility of the school for the initial adjustment of pupils, which implies placement of youths in jobs. But at times there are no jobs, or only a few.

With a fixed leaving age there cannot be a precise, or even an approximate, equalization between the number who leave school and the number of work opportunities. This situation may be overcome in part by providing what might be termed a variable leaving age. The leaving age would fluctuate with the ability of youth to find jobs. Such an arrangement would help rectify the present tragic situation in which hundreds of

### *General Summary of Recommendations*

children in the State are neither employed nor attending school, but who are creating a future social problem.

To argue that the pupil would receive little benefit from being forced to pursue this educational experience is to admit that a program cannot be made attractive and stimulating. The situation should constitute a challenge to school administrators.

#### *Regents' Examinations*

If the school assumes its obligation to certify that the pupil is able to adjust himself initially to his work, there seems to be little need for Regents' Examinations for the vocational courses. Furthermore, it would be extremely difficult to develop adequate Regents' Examinations in courses of which the content is subject to constant change. Neither do paper-and-pencil tests seem desirable, for they would distort the basic objectives of the vocational courses. In addition, lack of facilities in most schools makes it virtually impossible to give adequate trade tests of shopwork.

## CHAPTER VIII

### The Pupils To Be Served

**N**O SINGLE pattern of training for vocational adjustment can be appropriately developed to cover all types of individuals served by the secondary schools.<sup>1</sup> Different groups must be distinguished if the program is to accord with the conditions that must be faced.

For the purpose of this report, three groups of pupils are considered, which have been differentiated on the basis of grade accomplishment. Appropriate training in the field of vocational adjustment should be provided for each group. These three groups are designated as Level I, Level II, and Level III. Level I includes pupils through grade 9. Level II includes pupils in grades 10 through 12, whose full-time schooling is presumably to end within the secondary school period. Level III includes persons who have demonstrated their vocational competence under adult working conditions and those who have successfully completed a secondary school course through grade 12.

Little accurate information was obtainable from vocational schools concerning the level that local administrators expected each type of existing vocational course to attain. There was also considerable variation within each course in regard to the level attained by the pupils. In some schools, the administrators apparently had aims higher than it was possible for many of the pupils to attain; while in others the training was higher than the trade would accept.

<sup>1</sup>Secondary schools are here interpreted to include grades 7 through 12 and such postgraduate grades of less than college level as are deemed necessary in order to develop the program outlined in this report.

## *The Pupils To Be Served*

### PUPILS ON LEVEL I

Prior to the end of grade 9 the secondary school should provide an opportunity for each pupil to explore the type of training required for each of the major vocational fields which should be represented within the secondary school program.<sup>2</sup> For pupils whose subsequent education is to be along academic or professional lines, these introductory survey courses should be of value in developing a general understanding of important kinds of educational and vocational activity. For pupils whose full-time schooling is to end with the high school, these courses should lead to an intelligent choice of a major vocational field in which the individual pupil should seek definite training.

#### *Present Admission Policies to Vocational Courses*

At the present time one of the most disturbing problems in vocational education is the absence of an adequate admissions policy. The vocational industrial and vocational technical courses have on the whole as good admissions policies as any group, but even these fields fall short of desirable standards. Neither in commercial courses nor in homemaking and home economics courses are there any distinctive standards of admission. Eighth grade graduation or its equivalent, or membership in the grade in which a course is offered is the principal requirements. In general, neither special examinations nor tests are given in these fields, and the same situation is found in vocational agriculture. One of the important objectives of the first course in vocational agriculture is guidance in this field, but generally no other systematic guidance service is provided.

In most schools, the principal or the homeroom teacher is responsible for admission to the business course. Teachers usually cooperate with the principal, and guidance officers are

<sup>2</sup> In this report a program is conceived as a group of curricula or courses.

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rarely reported as being responsible for admission. Students may elect the commercial course because they are interested in it, because it is the only course in practical education that the school offers, or because paternal pressure or the desire to follow a white collar occupation sends them into it. As a result of the absence of an admission policy, commercial teachers in some New York schools estimate that as high as 50 per cent of the pupils enrolled are innately unfit for the work.

In some industrial high schools, mainly in New York City, ninth grade tryout courses are offered, but in certain other communities the pupil is admitted to industrial courses in senior high schools without such experience and the school has very little information about the pupil. In schools where only a limited number can be accommodated, the previous school record and physical fitness are taken into account. In some schools English and arithmetic tests are given. In one prominent vocational high school, the way in which future fields of activity were being laid out for the pupils on the basis of admittedly insufficient evidence was astounding.

### *Need for a Testing Program*

In order to help the pupil in making a wise vocational choice, the school, in addition to offering the introductory survey courses, should establish under competent supervision a testing program which will reveal the native and acquired abilities of the pupil. Throughout his entire school career he should receive advice and assistance from someone competent to guide him. Adequate records of each student should be maintained, which should contain among other things information regarding test results, health and activity information, school marks, data gathered from interviews, and program and personal adjustment problems.

If the pupil is to be aided in his ultimate selection of courses a scientific estimate should be made of his capacity along vocational lines. Merely to rely on the pupil's personal choice

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is not sufficient. In this connection, the American Youth Commission states as a result of its study of youth in Pennsylvania:

Since the right choice of a vocation is a most important matter for both individuals and society, there is grave danger of dissatisfaction among the great majority of youth in this regard because they tend to select occupations above or below their intellectual capacity. The facts seem to prove the utter unreliability of basing educational plans on youths' vocational choices. They also strongly indicate the desirability of school systems giving a great deal of attention to educational and vocational guidance by competent persons.<sup>3</sup>

The report also says:

The vocational preferences expressed by the Pennsylvania youth included in this study are of little or no value in determining the careers for which preparation should be made. Vocational and educational guidance studies of each youth made by those properly qualified should be provided to meet this important need.<sup>4</sup>

The vocational plans of 7,823 boys and girls who withdrew from New York general high schools between June 1 and September 30, 1936, disclosed that though specific vocational choices were roughly geared to the average abilities and financial resources of the pupils making them, individual pupils expressed unwise or impractical choices. Many pupils were too ambitious, in the light of the abilities which they had demonstrated, while others in the highest intelligence and achievement groups looked forward to vocations which would never really challenge them.<sup>5</sup> The presence of reputedly excellent guidance facilities or the absence of such facilities did not seem to have any observable effect on the nature of the students' future plans. Unwise rigid or vague plans were no more characteristic of pupils in schools without guidance departments than of pupils in schools which had them.

<sup>3</sup> Harlan Updegraff, *Inventory of Youth in Pennsylvania*, American Youth Commission of the American Council on Education, preliminary draft, pp. 71-72, 1936. Quoted by permission of the publisher.

<sup>4</sup> *Ibid.*, p. 79.

<sup>5</sup> Ruth E. Eckert and T. O. Marshall, *When Youth Leave School*, Regents' Inquiry, 1938.

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Marshall's study of the out-of-school adjustment of 1,626 general high school pupils, including both boys and girls, shows that irrespective of the type of community these young people live in, or of the occupations of their parents, a majority of the former pupils wanted white-collar jobs, and were dissatisfied when they found it necessary to take up any other kind of work. Many looked forward to entrance into the professions, even though there was little chance that their hopes would be realized.<sup>6</sup>

The youth survey made in Niagara Falls in 1935 showed that 40 per cent of the 1,018 high school graduates interviewed wanted to follow commercial work, while only 18 per cent were actually engaged in this type of work. Pupil choices, on the whole, are very restricted.

### *Pupil's Need for Assistance*

In addition to a testing program, an advisory service should be available, which should function continuously from the time the pupil is admitted into the secondary school until he has become initially adjusted or until he is nineteen years of age, and this service should be coordinated with an adult advisory service. Because of the complexity of the economic structure, the individual is in need of information concerning the problem of vocational adjustment during the period he is receiving his elementary and secondary education as well as after he has terminated his formal full-time education. Admittedly, the task of rendering this service in an adequate fashion is a difficult one, especially because of the tremendous increase in enrollments, but the fact that it is difficult does not imply that it is impossible.

Generally speaking, vocational industrial schools are conscious of the necessity of an adequate advisory, or guidance, service, although not all of them have developed one. Guidance for pupils in vocational or quasi-vocational courses in general

<sup>6</sup> *Ibid.*

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high schools depends largely upon the guidance programs developed for all pupils in such schools.

The interview study made of former pupils shows an apparent lack of any direct influence by the general high schools on the vocational choices of their pupils. The vocational schools, with some exceptions, apparently have only a small influence regarding curricula choices. Because of the serious situation existing in the general high schools it seems advisable to review briefly the situation as it is found in this type of school:

1. Pupils who have withdrawn from general high schools possess scant acquaintance with occupations which may be open to them. At best they are only hazily informed as to required aptitudes and training, possibilities for advancement, salary scales, working conditions, or opportunities for employment. Their lack of information or positive misinformation applies even to the occupations in which they are currently employed.

2. Most of these pupils can recall no advice from the school about their choices of either major curricula or elective subjects, at the time the choices were made. Even less frequently can they recall direct vocational advice.

3. General high schools are frequently not in position to give dependable vocational advice. In many communities the relationship between the school and industry is not cooperative. From the employers' point of view, school people in general know little about local occupations.

4. The school curricula followed bear slight relationship to the occupations in which pupils engage immediately after leaving school. In general, only the factor of academic intelligence seems to have been definitely considered by the schools in making curricula groupings. As a significant result, many pupils who have no money for college, or who do not wish to go to college, have received college-entrance diplomas; commercial diplomas in large numbers have been given to

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pupils in communities where there is a scarcity of clerical jobs; industrial diplomas have been granted pupils who were unsuccessful in other curricula, regardless of their aptitude for industrial work.

5. Employers frequently report that the general high schools' recommendations of applicants for specific positions are almost worthless.<sup>7</sup>

In order, therefore, to overcome such situations as have just been discussed, and in order to carry out the program outlined in this report, it is essential that effective testing and assistance, or guidance, services be developed, available not only at the time of entrance to the secondary school, but during the remainder of the pupil's public school career.

### PUPILS ON LEVEL II

For every pupil whose full-time schooling is to end within the secondary school period the secondary school should provide vocational education leading toward initial vocational competence. Admission to specific initial vocational courses should be restricted to pupils who have shown an aptitude for the training which the courses provide, and interest in such training in the introductory survey courses, but the total program should make provision for all who intend to terminate their full-time schooling with the secondary school.

#### *Importance of the Problem of Vocational Adjustment*

The analysis given in Part I of the available economic data, the results of the interview, leaving pupil, and test studies, and the existing total offerings of the secondary schools in the State show clearly that more attention should be given to the vocational adjustment of secondary school pupils.<sup>8</sup>

<sup>7</sup> *Ibid.*

<sup>8</sup> Concern over the problem of vocational adjustment was also evident in the report of the thirteen superintendents who were members of the National Occupational Conference tour. See *Occupations*, Vol. 15, No. 9 pp. 833-37. June, 1937.

## *The Pupils To Be Served*

Unemployment has been especially marked among youth. The Federal Office of Education has estimated that in 1936 there were 4,700,000 young people between the ages of sixteen and twenty-five out of school, unemployed, and seeking jobs.<sup>9</sup> The devastating effect of the depression has fallen with such force on youth that some writers have characterized this generation as a "lost generation."

The 1935 Youth Census made by the Welfare Council of New York City gives in graphic detail the situation which confronted youths sixteen to twenty-four years of age, inclusive, in the City.<sup>10</sup> A third of the total sample of the youth population was unemployed. Of the unemployed more than a third had never had a paid job lasting as long as one week. On the basis of this sample, the Council estimated that close to 390,000 young persons sixteen to twenty-four years of age, inclusive, were unemployed and seeking employment in New York City, and that of this number more than 140,000 had never been employed. The other two-thirds unemployed had had employment experience of various kinds, with about one-half in unskilled and semiskilled jobs and about two-fifths in clerical and kindred occupations.

The study shows that

. . . unemployed youth had been out of school for from a few weeks' time to ten years or more. The average for those who had never had employment was between one and two years, and for those with work experience about five. Almost all who had never had work, and a large proportion of the others, had left school at a time when they must have been faced with the fact of scant likelihood of their getting a job. Even so, three-fourths had left without completing high school.<sup>11</sup>

On the basis of its investigation, the Council states:

The amount of unemployment since leaving school . . . supports the prevailing belief that thousands of the youth of New York City, even when

<sup>9</sup> *Youth, How Communities Can Help*, United States Department of the Interior, Office of Education, Bulletin No. 18-I, Washington, D. C., p. 2, 1936.

<sup>10</sup> E. N. Matthews, "Unemployed Youth of New York City," *Monthly Labor Review*, Vol. 44, pp. 267-84. February, 1937.

<sup>11</sup> *Ibid.*, p. 268.

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they have been fortunate enough to get work of any kind, have been out of work more often than in a job, and that thousands have spent year after year in unbroken idleness.<sup>12</sup>

It has been difficult for young people to find employment during recent years because of the depression, but also because of a more fundamental reason—the changing policies of industry and business regarding desirable hiring ages. One of the most significant trends in the employed population in the last two decades has been the constant decrease in the proportion of children ten to fifteen years of age who have been gainfully employed. There has also been a comparable decline for the group fifteen- to twenty-years of age, but the extent of decline has not been so great. In addition to employer hiring policies, this tendency is also the result of higher standards of living of the people and a greater concern for the education of the young.

Of the pupils (more than 1,600) who withdrew from general high schools from June 1, to September 30, 1936, presumably to work, and who were interviewed from six to eleven months after leaving school, only 60 per cent of the boy graduates and 40 per cent of the girl graduates actually secured positions. Furthermore, among pupils who do not intend to pursue their formal education in any other full-time institution, the job is of major importance. Yet many of the former pupils in general high schools who were interviewed felt that they were not ready to begin work when they left school, and that they had neither the information nor the skills which would help them to begin work. Employers agreed with these statements and added that the attitudes of many of the pupils were such as to handicap them on their jobs.<sup>13</sup>

That many of these pupils felt the lack of adequate preparation was evident by the large number who subsequently enrolled in proprietary schools—a much larger proportion

<sup>12</sup> *Ibid.*, p. 283.

<sup>13</sup> Eckert and Marshall, *op. cit.*

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than those who enroll in the public adult education classes. Pupils were paying for such courses as: Diesel Engine, Electricity, Refrigeration, Television, Air Conditioning and Ventilating, Civil Service, Commercial Art and Photography, Undertaking, Motion Pictures, Radio Entertaining, Finger-Printing, Mechanical Dentistry, and Beauty Culture. The interview study reports that many of these pupils were undoubtedly being exploited.

### *Offerings of the Secondary Schools*

An analysis of the offerings of the secondary schools of New York show that the problem of vocational adjustment is being dealt with primarily in vocational education courses, while many secondary school pupils in general high school courses are being graduated (or in many instances leaving school) without any adequate training to meet the problem of finding and holding a job, even were one available. In fact, in one community the pupils do not realize that their diploma, if it is of a certain type, is a liability rather than an asset.

The traditional academic curriculum does not serve the needs today of a great many of the secondary school pupils, as has been recognized by many secondary educators. Certain pupils, because of a lack of intelligence, aptitude, interest, or inclination, are misfits in such a program. This is one of the reasons why vocational work was first developed. Pupils unfit for academic training, it was argued and still is argued today by some persons, should be given vocational training. But instead of placing the poor, the misfits, the mediocre, and the nonconformer into schools which might socially ostracize them, certain educators have attempted in some schools to develop suitable programs within the general high school to serve all of these pupils.

Commercial, home economics, and industrial arts courses have been introduced, among other reasons, to meet the changing needs of the pupils. In most of these schools the

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courses were simply added to existing offerings. What should have been done was to revise the curriculum in the light of the newer factors in economic and social life as well as of the changing needs of the enlarged school population.

To a certain degree these offerings have been expected to take care of the influx of pupils. Industrial arts was supposed to benefit those pupils who were not qualified for the college preparatory course, but the emphasis has been essentially nonvocational in character.

Secondary school education is not today primarily concerned with preparing pupils for entrance into higher institutions. Approximately 150,000 to 200,000 pupils in the State terminate annually their full-time education with the secondary school.

### *Traditional Courses*

The classical curriculum has been the traditionally respectable curriculum of secondary schools. Undoubtedly it did satisfy the needs of young people when the occupations of such graduates were the professions. The classical curriculum met the vocational needs of the limited number of young people who previously sought secondary education.

The great influx of children into the secondary schools during the last decade and a half has raised profound questions regarding the adequacy of existing courses of study. An increase in the compulsory school attendance age, changing policies of industry and business regarding hiring ages, and the blind faith of a large number of people in the value of a high school education have contributed to the difficulties confronting school systems and school administrators.

The traditional curriculum was essentially a cultural one but today this type of curriculum may not meet the primary need of many pupils in our secondary schools. The masses may consider culture a luxury, and it is to the masses that secondary education is catering. Though they may desire

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their children to learn about cultural matters, the masses are concerned primarily with more tangible aims—ability to earn money, ability to get a better job, or perhaps, just a job. In short, they are thinking of practical aims. The economic depression and technological developments have made them conscious of the necessity for having more adequate vocational educational preparation as one means of securing greater economic security.

The commercial course was conceived of as vocational in character, and clerical and vocational were synonymous. In New York this type of education has conformed to a common pattern, emphasizing largely specialization in the stenographic, bookkeeping, and general clerical courses. The course as it has developed in New York State has turned out to be quasi-vocational in character. It trains a relatively small proportion of its total enrollees. Out of the total number enrolled in business education in secondary schools of the State, probably less than 30 per cent are ultimately trained to meet definite vocational requirements. This may be one of the reasons why vocational educators have been interested in developing vocational commercial courses under their immediate supervision.

### *Vocational Courses*

Vocational education has seriously attempted to meet the problem of vocational adjustment through the development of courses in vocational homemaking, vocational agriculture, vocational industrial, vocational technical and, in recent years, vocational commercial courses. As has been stated earlier, graduates of vocational schools are probably better adjusted vocationally than are the general high school graduates.

But certain of these vocational courses, especially in the vocational industrial and vocational technical fields, have been available only in given localities, mainly in the larger cities.

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Furthermore, there is little opportunity for pupils of secondary school age to move from one community to attend industrial courses in another part of the State, unless they have been arrested for committing some misdemeanor, are wards of the State, or are in unusually favorable economic circumstances. Only two or three vocational schools in the smaller cities have any appreciable number of nonresident pupils.

In addition, vocational education, at least in the industrial field, has been confined largely to specific training for highly skilled trades. Training for semiskilled occupations has been virtually ignored. Most vocational educators were willing to point to another school in another state where training is offered.<sup>14</sup> Only a few school systems in New York State are consciously attempting to give appropriate training to pupils who will eventually become semiskilled workers. It is clear that such attempts were not considered within the pale of vocational education by most vocational educators, and have up to now been discouraged by most federal vocational education officials. Vocational education virtually denies the possibility of any transfer of training and hence it has emphasized training for a specific trade. By accepting this thesis it has severely limited its scope of activity. The early devotees of industrial arts may have gone too far in advocating a transfer of training, but vocational educators have gone to the other extreme.

The Federal Office of Education, in the February, 1937, "Statement of Policies for the Administration of Vocational Education," states that "it [vocational education] may be given to boys and girls who, *having selected a vocation, desire preparation for entering it as trained workers.* . . ."<sup>15</sup>

Training for vocational competency cannot be restricted to the few and remain separate from all other types of secondary

<sup>14</sup> For example, in Essex County, New Jersey.

<sup>15</sup> Vocational Education Bulletin No. 1, General Series No. 1, Revised Edition, p. 6, February, 1937. Italics were not used in the original.

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education. It should be available to the many, and be made a part of an integrated secondary school program.

Were vocational training provided for potential workers on all levels of skill requirements, to the end that all citizens might work and find happiness to the limit of their capacities, it would be more consistent with our belief in democracy. In the early days of vocational education, the vocational educator criticized the general high school for its failure to do a job which should have been done. If vocational courses attempt to become exclusive and fail to meet the needs of all classes of pupils who desire and need training for vocational adjustment, many will be forced back into the general high schools. Under such conditions vocational educators will be guilty of the very charge they formerly levied against the general educator. What is needed is a democratic, and not an aristocratic, concept of vocational training. Such training would be consistent with the demands of the modern economy, which is not an economy of highly skilled crafts alone, but an economic structure in which all forms and types of skill are needed. To neglect the large group that does not require highly skilled preemployment training is today unwise and is inconsistent with modern economic life.

### *State Responsibility*

Vocational adjustment is not the problem of only a few secondary school pupils on leaving school, but one which must be met sooner or later by virtually all pupils. Today, the main source of help for these pupils is their own initiative, but self-reliance alone gives rise to tragic social costs. The problem of adjustment is a social, as well as an individual, one, and it follows that the State must be concerned with it.

Because the State already assumes an obligation for the initial education of youth, presumably to meet the problems of life, the schools must assume their share of the responsibility of seeing that youth is at least initially adjusted to economic

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activity. The problem of vocational adjustment cannot be relegated to certain schools or special departments of a secondary school, but must be a major obligation of all secondary schools for all pupils until initial adjustment has been accomplished or, say, until the individual is nineteen years of age.

If this obligation is to be assumed, the secondary school curriculum needs to be fundamentally revised. The educational system must provide every child with the opportunity to pursue that type of education which will best advance his welfare in ways consistent with the welfare of society. This is democratic education.

If, therefore, the problem of initial vocational adjustment is to be the concern of the educational system, it should be made a definite part of the secondary school program, and should be inclusive, dynamic, realistic, adequate, effective, socially desirable, and socially economical.

### PUPILS ON LEVEL III

As a part of the total program of secondary education there should be provided vocational institutes and technical institutes for advanced vocational and technical training. Because of the shorter work day, and the continuous changes in economic life, this type of education should be available for every worker who is capable of profiting from instruction.

#### *Vocational Institute Pupils*

The work of the vocational institute represents a continuation of the school's interest in the problem of vocational adjustment. Of all the vocational offerings in the State at the present time, the adult program is probably the most inadequate. In 1935-36 the total number enrolled in evening trade extension classes was only 7,289, a number equal to only about 13 per cent of the all-day industrial enrollment. Furthermore, many of these classes were limited to those already in the trade. The adult program in vocational agriculture is also

## *The Pupils To Be Served*

inadequate. Clearly more attention should be given to the problems of those who are becoming adjusted to their work. Often a beginning worker soon finds that additional training would be advantageous. He has a specific objective in taking such courses, and his outlook, motivation, and point of view represent a maturity not found among most pupils in grades 10 through 12. The institute can give him the type of education he now needs, and it is advisable not to mix such students with those in grades 10 through 12.

Admission to courses in vocational institutes should be restricted to persons (irrespective of their chronological ages or educational background) who have demonstrated their vocational competence under adult working conditions. Success in initial vocational school training should not be accepted as a substitute for this requirement.

### *Technical Institute Pupils*

There is a place in New York State for technical institutes which will offer a two-year terminal technical education in grades 13 and 14. The National Society for the Promotion of Engineering Education has estimated that there is an acute shortage of technical assistants in industry. The growing importance of the technician in modern industry points to the necessity for the education of technical assistants of all kinds. The newer types of semiprofessional occupations, for example, laboratory technicians, increased rapidly in New York from 1910 to 1930.

In spite of these facts the State lacks facilities for this type of training. Comparatively few educational institutions have attempted to meet this need. One technical high school is approaching a course of this type by adding recently a fifth year to its program.

The State Education Department has announced the introduction of certain junior technical, as well as industrial, courses open to high school graduates in the state schools of agriculture

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located at Alfred, Canton, Delhi, and Morrisville. This attempt to meet the needs of rural youth will be discussed in detail in a subsequent chapter.

Within the twelfth grade it is practically impossible to give adequate technical courses unless the school practices a highly selective admissions policy, and even then many students must be dropped before they complete the course. Dropouts, as has been mentioned earlier, are frequent in technical courses. Satisfactory technical education should require work through the fourteenth year. Some pretechnical institute work of a general nature might well start in the eleventh or in the twelfth years.

Admission to technical institute courses should be restricted to students who have successfully completed a secondary school program extending through grade 12, and who show definite aptitude for semiprofessional training. Work experience is not required for this type of course, for it is not concerned primarily with the mastery of manipulative skills, but rather with fundamental understandings.

## CHAPTER IX

### Objectives of the Program

**H**OW FAR should vocational education at the secondary level be carried? Specifically, what should be the major objectives insofar as furthering the vocational adjustment of pupils is concerned? How much training in skills should be involved? Should the program include placements? For reasons which will appear obvious, the main portion of this chapter will be confined to pupils in grades 10 through 12, that is, pupils on Level II. However, the objectives of the work for Level I pupils will also be discussed because they contribute to the subsequent educational program.

#### OBJECTIVES OF LEVEL I

In grades 7 through 9, each pupil should have the opportunity of receiving instruction in introductory survey courses. These introductory survey courses should be designed to acquaint the pupil with the major vocational opportunities and requirements of important broad occupational fields, and to help each pupil analyze his own interests and abilities in relation to the types of learning involved. Each pupil should have sufficiently wide experience in these courses to insure intelligent choice of an educational career. These courses should not attempt to develop vocational skills, but should be given for the purpose of orientation and to help the pupil to explore the training required in various fields of activity. They should be devoted to a round of nonvocational experiences in different fields, which will reveal the student's interest and potential capacity.

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One boys' high school attempts during the ninth year to give the pupils an extensive range of experience in activities representative of the more general occupational fields. Each pupil receives instruction in commercial, industrial, arts and crafts, electricity, and machine shops. This combination may or may not be appropriate for all types of pupils, and is not intended to be, but it does give some indication of the variety of experiences this school is attempting to give its pupils.

The New York City Vocational Survey Commission had this to say concerning industrial work in the junior high schools:

Tryout opportunities should include a series of shops, each shop to center its activities in a basic raw material or a basic process, and to include among these activities a great variety of practical manipulative trade operations. The objective should be to test the pupil's ability in fundamental trade processes and to observe his interests in them.<sup>1</sup>

The vocational educators in the City believe that a non-vocational exploratory course in the ninth year is desirable. They conceive of this ninth year work as important for guidance, exploration, selection, vocational preparation, and general education—all for the purpose of insuring intelligent selection of the type of education to be followed in the senior vocational high school. Such a course should obviate the high mortality and consequent waste found in some schools.

### OBJECTIVES OF LEVEL II

For every pupil whose full-time schooling is to end within the secondary school period, the secondary school should provide a vocational education which will enable the pupil to secure and hold a job in a vocational field sufficiently broad to give reasonable assurance of opportunity for self-support and advancement to the limit of the pupil's potential ability.

<sup>1</sup> Vocational Survey Commission, *Vocational Education and Guidance in New York City*, p. 60, 1932.

## *Objectives of the Program*

The purpose of the initial vocational courses should be:

1. To develop such habits and attitudes as will lead the pupil to work cooperatively and happily with others in whatever general field of vocational activity he has chosen;
2. To provide such acquaintance with the major vocational processes in the chosen field as will make him an apt learner on the job, and will enable him to adjust himself to varying requirements;
3. To give the pupil a knowledge of the conditions of work, wages paid, opportunities for advancement, and such other information regarding an occupation as will enable him to make an intelligent beginning as a worker;
4. To give a knowledge of the kind of training necessary for advancement in the field, and of where and how to obtain that training; and
5. To provide a training in basic elementary skills with enough limited specialized skill training to give the pupil the marketable ability necessary to obtain a beginning job.

It should be noted that the emphasis is on breadth in basic training rather than on narrow specialized skilled training. The training may be in semiskilled or even skilled fields, provided it has wide applicability.

A secondary school should not seek to give its pupils a higher degree of specialized vocational skill than the minimum necessary to obtain and hold such jobs as may be normally open locally to beginners in their chosen field. For example, the secondary school should not train vocationally inexperienced pupils to be specialists in electric welding, though it may train them to be electricians' helpers. It should not try to make them specialists in horticulture, though it may make them sufficiently competent to support themselves as general agricultural workers.

The emphasis should be on training for initial adjustment to economic life, because both individuals and conditions change, and new and later adjustments will be necessary.

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Second, agencies other than the secondary school should be concerned with these later adjustments. Third, since the school has a limited amount of time at its disposal in which to train the pupil, it can have greater success in obtaining its objectives if it confines its attention to the problem of the initial adjustment. Moreover successful initial adjustment holds a promise for successful adjustments later in life. By confining its attention to the realities of the immediate situation the school is not overlooking the ultimate—it is, in fact, making more possible the attainment of that end.

By successful initial adjustment is not meant an ideal adjustment to the environment, since adjustment must be thought of as relative. Successful vocational adjustment implies as efficient and effective an adaptation to the environment as is possible, and recognizes the differences in individuals and in conditions to be faced. It does not assume that a single common pattern or even a few common patterns are appropriate for all individuals.

### *Desirable Attitudes and Habits*

If the pupil is to become successfully adjusted and to work with others it is essential that he have certain desirable habits and attitudes, such as responsibility, industriousness, self-reliance, promptness, and cooperation. As has already been pointed out, employers frequently told the interviewers that the attitudes of many of the pupils from general high schools were such as to handicap them on their jobs.

Studies of the causes of discharges show the importance of developing desirable attitudes among workers. For example, Brewer's study of the causes of discharge of 4,375 industrial workers shows that nearly twice as many were discharged because of moral shortcomings, or defects of character, as for lack of ability to do the work required.<sup>2</sup>

<sup>2</sup> J. M. Brewer, "Causes for Discharge," *Personnel Journal*, Vol. 6, pp. 171-72, October, 1927.

## *Objectives of the Program*

The Essex County Vocational School found that "employers complain of a lack in semiskilled workers of proper work attitudes and habits."<sup>3</sup>

### *Acquaintance with Major Vocational Processes*

The pupil should be acquainted with those vocational processes in his chosen field that will make him an apt learner on the job, able to adjust himself to varying conditions. He must be able to learn on the job, especially since he cannot expect to acquire all the training necessary in his initial vocational education course. Furthermore, he may find it necessary to acquire new skills if he moves to another occupation, or if the nature of his work changes.

The study of economic factors made by the Inquiry staff showed that, because of the complexity of the economic structure, the individual pupil is in need of information concerning the problem of vocational adjustment, both during the period he is receiving his elementary and secondary education and after he has terminated his formal full-time education.

### *Information Regarding Occupations, Advancement and Training*

The interview study disclosed, as has been previously pointed out, that general high school pupils have little information regarding various occupations, possibilities of advancement, opportunities for employment, and training required. The extent to which these pupils turned to proprietary schools, some of them of questionable worth, is evidence of their inability to discriminate between acceptable and unacceptable educational agencies.

### *Basic Elementary Training*

The secondary schools should attempt to train the pupil, insofar as trade techniques are concerned, in a wide range of

<sup>3</sup> *Multi-Occupations Courses, or General Vocational Courses, 1935.*

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elementary skills adaptable to a group of occupations which will serve as a broad general base for the pupil's initial adjustment. An individual employer cannot be expected to give his workers such training, for they may leave his employment after completing it. Interested as he is in a specific return for his financial outlay, he will be inclined to give the training which is advantageous to himself. The schools must give this basic training. However, the school should not be an annex of the factory, instructing workers in each individual task that can be more easily learned on the job, nor should the school usurp industry's responsibility for sharing in the training. Rather the school is to supplement this training, and to offer the training that will ease the adjustment from school to shop. In addition, the basic training should enable the pupil to discover his latent capacities and enable him to direct his activities towards those fields in which he has a better opportunity of attaining successful adjustment. Also, the training should be useful in helping the pupil to adapt to changing industrial conditions. Considerable evidence is available on the desirability of basic training rather than of specialized and intensive training. Occupational obsolescence, displacement and reabsorption of workers, and changing occupational demands emphasize the importance of basic training.

On the basis of a careful job analysis of manufacturing plants in Minnesota, C. A. Koepke reports:

Today factory workers should be taught not one trade but the basic operations of industrial production as a whole. Detailed knowledge of the handling of a particular machine or of the working of a particular material is less important now than it was formerly, when jobs were less rigidly defined and less quickly learned. A production worker would benefit more from training in dexterity and bimanuability than from detailed mechanical knowledge. If in addition he were trained to eliminate waste of materials, time, and motions or energy he would be invaluable to industry.<sup>4</sup>

<sup>4</sup> C. A. Koepke, *A Job Analysis of Manufacturing Plants in Minnesota*, pp. 18-19. University of Minnesota Employment Stabilization Research Institute, 1934. Quoted by permission of the publisher.

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In the summer of 1936 a conference under the auspices of the American Youth Commission was held in New York City to discuss the problems concerning the education and employment of youth. Representatives of the following organizations were present: United States Department of Commerce, National Youth Administration, American Association of Social Workers, National Conference of Social Work, Community Chests and Councils, American Federation of Labor, National Association of Manufacturers, National Industrial Conference Board, and the United States Chamber of Commerce. At the conclusion of the two-day conference a sub-committee issued a report from which the following excerpt is taken:

The schools may legitimately provide certain young persons with direct training in those skills or operations which are common to a large number of occupations and avocations. . . . Vocational education for a specific job should rarely if ever be undertaken by the public schools.

In an address before the Production Managers of the Scientific Apparatus Makers of America, in December, 1936, William F. Johnson, of the Taylor Instrument Company, of Rochester, New York, said:

The untrained student today lacks something essential when he seeks industrial employment, and lacking it, is either rejected or gets a poorer sort of job than the trained student. However, it is the general opinion that 'it is not training for any particular job in industry that is the valuable contribution of the schools, but general training at mechanical jobs, especially the acclimation of the student mechanically and industrially. The most valuable attribute of the trained high school boy is his mechanical resourcefulness, his mechanical adjustability to job conditions, the sort of man who can shift, as required, from one job to another.'

The usual method in manufacturing industry is for the foreman or a fellow worker to train the workers. Koepke found that 94.5 per cent of the workers in sixty-six manufacturing plants in Minneapolis and in St. Paul, Minnesota, were trained

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by these means.<sup>5</sup> A recent study by the National Industrial Conference Board discloses that these same practices were prevalent in the companies which it surveyed.<sup>6</sup>

The Essex County Vocational School before it developed its Multi-Occupations Courses attempted to find out what would be required of semiskilled workers and as a result of its investigation states:

Our Junior Employment Service was . . . called upon and asked to gather (by reviewing its records, by observations in industrial plants and by questioning employment managers) such data as might help answer this question. Here are some of the things it reported.

1. Semiskilled and odd job workers in industry acquire their skill on the job.
2. The training thus given for a specific job or process seems to be satisfactory and it is doubtful if the school could improve on it or in many cases even equal it.
3. Only in a very few instances is anything being done in industry to develop in semiskilled workers the ability to do more than one highly specialized job or process.
4. There is a high employment turnover in all this great field of employment below the skilled level; there is even a considerable shifting from one type of work to another, *e.g.*, from semiskilled or odd jobs in industry to domestic or personal service work or to store work.
5. Some people are able to make these shifts much more readily than others.
6. Those who are able to make such shifts readily have more regular employment than those who are not able to make them readily.
7. Some types of experiences in semiskilled work appear to make people easily adaptable to a number of semiskilled jobs, *e.g.*, employers who use the Junior Employment Service call for girls or boys with 'some mechanical experience' for several different types of semiskilled jobs. Other similar requests are for those who have had experience in 'fine assembly work,' 'the operation of power driven machinery,' 'production work involving the use of jigs and fixtures.'

<sup>5</sup> As reported by V. C. Fryklund, in *The Selection and Training of Modern Factory Workers*, p. 17. University of Minnesota Employment Stabilization Research Institute, 1934.

<sup>6</sup> National Industrial Conference Board, *Training for Industry*, pp. 18-19. New York, 1937.

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8. Employers prefer to train their semiskilled employees in the specific operations they are to do but want to hire those who have had some experience which will make it possible to train them in a reasonable time and with a minimum of spoiled work.
9. Calls for store workers and domestic and personal service workers frequently specify simply that the applicant must have had some little experience in that type of work.<sup>7</sup>

The reports of the vocational specialists on the Inquiry staff urged the expansion in certain fields of a more basic training. In the trade and industrial field, a program appropriate for the semiskilled workers was advocated. The report on business education points out the desirability of developing a basic business education course, distinct from a technical, or vocational, course. At present the combination of the two has resulted in an inadequate development of both types. The business curriculum as it exists today is a group of subjects in which the generalizations, learning processes, and grade-to-grade growth appear irregular and disjointed.

### *Marketable Skills*

By the final year, and this does not necessarily mean the twelfth year, the pupil in most courses should receive some specific training which will enable him to become familiar with basic operations of an elementary character, *i.e.*, to develop insofar as possible certain definite marketable and saleable skills.

Richard R. Brown's testimony on the question of the employment of youth has an interesting statement bearing on this point:

We have found that more employers ask, 'What can you do?' than 'What do you know?' when a young man or woman applies for work, and under the prevailing system of present-day education few are able to offer any tangible skills or abilities.<sup>8</sup>

<sup>7</sup> *Ibid.*

<sup>8</sup> *The New York Times*, April 25, 1937. "Multiple Skills Called Key to Job," by Richard R. Brown, Deputy Executive Director, National Youth Administration.

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The same condition was found by the Essex County Vocational School in its investigation of semiskilled trades.

The amount of time devoted to such instruction will vary with the nature of the skill being taught and also with the pupil; a longer time may be required for dull pupils than for bright ones. In some courses less than a year, while in others more than a year may be necessary.

The reason "the final year" is used rather than the twelfth year is that this type of work should be given, whenever needed, before the pupil leaves school. To say that the work should be given in the twelfth year is to ignore the fact that some pupils leave school before the twelfth year, and many of these leaving pupils are the ones who will profit most by such instruction. To see that the pupil receives this instruction in his final year means that the schools will have to be better informed concerning each pupil's activities and plans than they are at present.

Care must be exercised that the curriculum does not become distorted by the introduction of production work of a single type. This would prevent all-round experience.

### *Versatility*

Inherent in what has been said regarding breadth of training is the desire to train for versatility.

The National Industrial Conference Board found that of 473 companies, of which 305 were in the metal products and machine and machine tool plants, 47 per cent had definite policies for training employees for more than one task.<sup>9</sup>

Verne C. Fryklund, in a study of the selection and training of modern factory workers, says regarding versatility:

Society is slow to recognize that the changing demands of industrial activity call for corresponding changes in the methods of training. Since the breaking up of the skilled trades into numerous specialties has reduced the number of duties required of each worker, training must

<sup>9</sup> National Industrial Conference Board, *op. cit.*, p. 22.

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necessarily involve smaller work units which may not have a direct relation to the craft originally learned. Because of constant shifts within factories and frequent layoffs it is necessary for men to be so trained that they can make adjustments readily to small work units whenever they are assigned to new work. Employment must be made as continuous as is humanly possible by training the workers to do more than one thing, though they ought not be given extended trade training that they may never be called upon to use.<sup>10</sup>

The evidence presented earlier on the economic factors influencing the problem of vocational adjustment also shows clearly the desirability of developing versatility in workers. Although the total economy is characterized by basic processes and fundamental principles which are substantially unchanging, economic activity is nevertheless characterized by inevitable and continuous change—change in the kinds of work done, in the amount and character of skill required in a given occupation, et cetera. Technological developments, changes in productivity, and shifting consumer wants and social mores give rise to new methods of work and changes in old ones. As each industry, and hence as each job opportunity, expands or contracts, as territorial and regional shifts in agriculture, business, and industry take place, any program dealing with vocational adjustment must consider the consequences. For an individual these changes in economic activity call for an ability to adjust and adapt oneself to the new environment, hence, the more versatile the basic training, the easier will be the adjustment. There seems to exist a higher degree of horizontal mobility within occupational patterns than exists between occupational levels.

Prosser and Allen in their book, *Have We Kept the Faith?* state:

The life history of most really successful individuals will show that they have constantly changed their employments, partly because of the creation of new jobs which they had to learn, and partly through shifting from one

<sup>10</sup> Verne C. Fryk und, *The Selection and Training of Modern Factory Workers*, p. 7. University of Minnesota Employment Stabilization Research Institute, 1934. Quoted by permission of the publisher.

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job to another, as opportunity offered. If any group of fairly successful men were asked, at the age of fifty, how many were still in the line of work which they originally entered, their answer would show that this was true of very few, if any of them. Not long ago one of us took occasion to ask a group of two hundred persons engaged in vocational education three questions regarding their careers. To the first question, Are you in the same line of work you entered when you left school? ten answered "yes," but 190 "no." To the second question, Are you in the same occupation in your present line as when you first entered it? forty said "yes," but 160 "no." To the third question, Are you in the same line of work for which you had long planned before leaving school? two replied "yes" but 198 "no."<sup>11</sup>

The Division of Research of the FERA made an analysis of the occupational shifts of the May, 1934, urban relief roll, and found that nearly a fifth of all employed workers on relief had changed their occupations, with the skilled workers shifting their occupations proportionately more than other groups.<sup>12</sup>

The vocational schools in New York City have recognized the needs of this training for versatility. William E. Grady,<sup>13</sup> in his 1935-36 annual report states:

. . . the vocational schools . . . are still training for certain specific jobs, and will continue to do so as long as these jobs continue to exist in sufficient number to absorb the trained personnel. But even in these lines, such training must be given with an eye to the future. Rapid change in technology requires the shifting of abilities. The worker with diversified training can make the shift more readily than the one without it. So the New York vocational schools, especially those known as "general" schools, are training for such diversity. "General mechanics" and "general shop" courses provide for a shifting from activity to activity in much the same fashion as in life.

Formerly these schools had for their primary objective training in one trade skill and the learning of related trade facts. Two years of this and the pupil was graduated or not graduated, according to his "success" or "failure." Now the schools do not lose sight of the necessity of training for specific skills or of a

<sup>11</sup> C. A. Prosser and C. R. Allen, *Have We Kept the Faith?*, p. 89. New York; The Century Company, 1929. Quoted by permission of the publisher.

<sup>12</sup> See *Occupations*, Vol. 13, p. 837, March, 1935.

<sup>13</sup> William E. Grady, *Report to the Superintendent of Schools*, p. 3. Mimeographed, 1936.

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measure of this skill, but they also refuse to lose sight of the necessity of training for all-round citizenship, not through lectures, not through textbooks, not even through projects (solely), but through earnest vocational activity in all its phases.

B. F. Kimball in his study of occupational trends in New York State concludes:

Whatever vocational courses are offered in the public schools should avoid too narrow a specialization within an occupational field and should prepare the individual to shift with facility to a related occupation.

Pupils should have the opportunity to develop several interests and abilities in order that they may more easily shift from one occupational field to another.<sup>14</sup>

Hence, training in versatility should be a part of the initial vocational education course and it is also a reason for the existence of the vocational institute courses.

Not a narrow, but rather a wide, range of elementary skills serviceable as a broad base for the pupil's initial adjustment seems desirable in grades 10 through 12. At the present time most vocational industrial education is concerned with the preparation of young people for entrance into specific skilled and craft trades, but a program involving all those who expect to terminate their full-time schooling with the secondary school must be constructed on a broader base.

In order to take advantage of the motivating force of courses in specific fields, the schools could develop these basic skills through such courses, and the special interests of the pupils should be utilized wherever possible. However, care must be taken in developing a program to prevent the schools from overtraining. Different levels of initial vocational training, depending on the particular course, should be established. Cutting down overtraining in one course, may result in financial savings which will allow a higher level of training in another course.

<sup>14</sup> B. F. Kimball, *Changes in the Occupational Pattern of New York State*, p. 165. Educational Research Studies, No. 2, New York State Education Department, Albany, 1937.

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It is not the function of the secondary school in grades 10 through 12 to develop full-fledged craftsmen. Indeed, certain vocational industrial courses in the State are attempting to train beginners at a level higher than the trade is willing to recognize. The graduates of one course in more than one center started employment on the same level as those who had no experience and there was no indication that the pupil who was trained in this work would be permitted to advance any faster on the job than the inexperienced beginner. The age of the student and other obligations of the school, such as education for citizenship, prohibit training for full craftsmanship status. The school should restrict itself to giving the pupil an education which will enable him to commence work as a beginner. This does not mean he should not receive any training in a specific type of job. On the contrary, the recommendation has been made that he should receive during his final year training leading toward the development of a marketable skill, since many employers seem to be interested in what a prospective employee can do. This training will enable the pupil to offer some practical experience, even though it may be only the ability to operate a power machine or to do simple operations around a farm, a home, an office, or a garage.

### *Opposition to a Broad Basic Program*

It is surprising that many of the opponents of a broad basic training are found among vocational educators. This attitude is perhaps due to the concept that vocational education is preparation for specific skilled employment. Of course, a more general training is not a *substitute* for specific skilled training, but this report has not conceived of such narrow specialized training as the province of vocational education in grades 10 through 12. Furthermore, this report is also concerned with the large number who will be employed in various lines of activity on less than the highly skilled level.

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### OBJECTIVES OF LEVEL III

The courses in the vocational institutes and technical institutes should be designed to furnish (1) upgrading vocational education for young people who have demonstrated initial competence in a general vocational field, and (2) preparation for vocations which require a more extended period of initial schooling than can be provided prior to the end of grade 12, but which demand less training than that offered by four-year higher institutions.

The vocational institute is concerned with the first. Its courses should be designed to provide specialized vocational training of a type not readily obtainable through employment itself, leading to increased opportunity for advancement in the general field in which the student has demonstrated his competence.<sup>15</sup> Specialized training in electrical welding, or cafeteria or tearoom management, or costume designing, or horticulture, or stenography may properly be offered as a part of the program in vocational institutes even though such training should not be open to the vocationally inexperienced pupils who are receiving initial vocational education.

There is no need for the vocational institute to give upgrading work of a type which can readily be obtained through employment itself. It should, however, give instruction when such work is not otherwise available. Types of work change and, furthermore, employees cannot obtain all the needed training in grades 10 through 12. The members of the Inquiry staff were told that many of the pupils in certain trade extension classes were recent graduates of vocational classes. This is the type of student for whom the vocational institute will serve a useful purpose. Youths with some work experience who wish to

<sup>15</sup> Courses designed to make possible vocational readjustment in the case of students who wish to change their original fields are properly a part of the adult education program, but are not here considered. In fact, less attention will be given to the whole field of the vocational institutes in this report than would be the case if the Inquiry did not have a special report on adult education.

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improve their position by acquiring further training along specific lines will be greatly benefited by this type of educational program.

Technical institute courses should be concerned with the preparation of students for beginning employment in occupations which fall between the skilled crafts and the highly scientific professions, for example, laboratory assistant, the dental hygienist, the surveyor, the architectural assistant, and the dietician. The training of secretaries, as distinguished from that of routine typists or stenographers, should be put on the basis of technical institute courses.

The technical institute can adequately train many persons who could not be so trained in grades 10 through 12. To train secretaries, or junior engineers, or dieticians in these grades is impracticable, but a satisfactory program could be worked out in such an institute for the pupil who has had the basic training, and, in addition, is more mature.

### OBLIGATIONS OF THE SECONDARY SCHOOL

Not only should the secondary school assume the obligation of providing appropriate vocational training and of offering facilities which will aid the pupil in making desirable choices, but it should likewise be responsible for (1) certifying that the pupil can adjust himself to his work and that he possesses the requisites for employment in a broad general field of activity; (2) aiding the pupil in becoming initially placed in his work; and (3) following the subsequent vocational activities of pupils during the first eight months of their initial employment or until they are nineteen years of age. In assuming these responsibilities, the secondary school should cooperate with all agencies capable of rendering assistance.

#### *Certification*

If the school professes to offer a service, it should be willing in a definite and tangible way to stand back of its service.

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No school should graduate a student unless it is willing to certify that the pupil has the qualifications necessary to become a socially and economically useful human being at the time of graduation. In giving its stamp of approval on the ability of the pupil to adjust himself initially to his job, the school should consider such factors as health, chronological age, social attitudes, and the ability to work with others, as well as the acquisition of any basic elementary skills which the pupil may require. Mere marks should not be the basis of certification.

At the present time the earning of a school diploma makes a significant difference in the willingness of the general high school to recommend a pupil for employment. Yet the measures of school success which general high schools commonly use have little predictive value with respect to a pupil's immediate chance of employment. And the basis on which the schools recommend pupils for employment differs considerably from that on which employment is actually given. Though recommended pupils tend to be more intelligent than those not recommended, they obtain jobs with only slightly greater frequency.<sup>16</sup> It will be remembered that the interview study pointed out that employers frequently reported that the schools' recommendations of applicants for specific positions were almost worthless.

School administrators think of secondary school business education primarily as vocational in nature, yet they frequently report that there are many pupils enrolled who are not qualified for this type of work. Twenty-six of a total of fifty-eight principals of schools in which commercial work was taught reported that over 40 per cent of their pupils were not employable at the going rate for beginners. Whatever may be the cause, whether it is lack of an adequate admissions

<sup>16</sup> Based on reports of over 32,000 pupils from general high schools, who left school between June 1 and September 30, 1936. See Ruth E. Eckert and T. O. Marshall, *When Youth Leave School*, Regents' Inquiry, 1938.

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policy or something else, the school cannot graduate these pupils without seriously undermining the prestige of a commercial diploma.

### *The Leaving Certificate*

Furthermore, all children who leave school, whether at the time of graduation or earlier, should be given an itemized record of their accomplishments in the form of a leaving certificate. This certificate should not merely list the subjects completed, but should describe in detail the nature of the course. This suggestion is not impracticable. The plan is already in operation in at least one state and should seriously be considered for adoption in New York.

The leaving certificate will assist evening school administrators in planning a schedule for the pupil when he presents himself for additional training, and will provide the information that will help the employer to start the worker at his proper training level.

If graduation is based on a certification of the ability to adjust to the environment, the time it takes a pupil to reach the desired end is a variable factor. Progress through the course should be on an individual basis. If one pupil is more capable than another, his advancement, of course, should be more rapid. One vocational school in the State, organized on a modified Dalton plan, has a flexible entering and leaving program which allows the pupil to progress at his own speed and to be discharged when the course is completed.

The assumption of this obligation by the school to certify the pupil also means that the pupil's schedule should be revised and readjusted when necessary. The story is told in one vocational school of a pupil who after failing in one course was transferred to another course in which he eventually led his class at the time of graduation. Such successful transfers may be exceptional, but advantages certainly could be secured from such a policy, not only in regard to the transfer to different

## *Objectives of the Program*

courses, but also to the rearrangement of a schedule within a certain course.

It is more difficult to transfer within vocational industrial schools from course to course than would seem desirable except in those schools where the ninth grade tryout system is in practice. Here transfers are encouraged in order that the pupil may enter the course which best fits his abilities and interests.

### *Initial Placement*

If the school is to assume the obligation of training for initial adjustment, it should see to it that the pupil is successfully placed in an occupation. "Placement opportunities," says one New York vocational industrial school principal, "or lack of opportunities, should always be used as an index of the schools' efficiency and society's receptivity."

Guidance, buildings, equipment, supplies and teachers are of little avail unless the pupil finally is able to obtain a job and to become adjusted to his work. These are the criteria of the success or failure of the program.

In times of job scarcity, the secondary school, that is, schools dealing with pupils in grades 10 through 12, should provide beginners with work opportunities around the school, paralleling those which would normally be open to them. Work of this character, for example, minor repair work on buildings and care of school grounds, has been offered during the depression by certain secondary schools. The possibilities of developing this type of work has not been sufficiently explored by educators, but should constitute a challenge to the school administrator. In a few isolated cases this challenge has been accepted and successfully met.

In general, the present placement program is unsatisfactory in certain fields and open to considerable improvement in others. On the whole, the strictly vocational schools are more concerned with the problem than are the general high schools.

## *Education for Work*

The vocational schools have always believed that the successful placement of their graduates was an obligation of the school. They have at least recognized the obligation, although they have not always agreed on how it should be met, nor has placement been as efficiently carried out as it should have been.

The vocational schools have only incomplete information available concerning the number of graduates who are placed in the occupations for which they are trained, or in allied occupations. Clearly, more accurate data regarding placement is needed for all schools.

It seems advisable to mention again the extent to which the graduates of certain courses at the present time find employment in the occupation for which they were trained. The vocational industrial courses make a better showing than do the commercial courses. According to the Vocational and Extension Education Division, in 1936 63 per cent of the vocational industrial high school graduates were placed in jobs for which they were trained, while, as nearly as could be determined, less than 30 per cent of commercial graduates were so placed. The low percentage in the commercial field was probably in part due to the large number of graduates involved. The high percentage in the industrial field was due as much to the relative insignificance of the number of such pupils, when compared with the number of workers, as to any well-planned program of adjustment to industrial needs.

All schools in which the pupils terminate their full-time schooling with the secondary grades should be concerned with placement. In most nonvocational schools placement is either unsatisfactory or nonexistent, with the result that thousands of students are sent out into the economic world without receiving adequate assistance in finding appropriate employment.

As a result of the amendment to the Education Law requiring cities of over 100,000 population to maintain guidance bureaus, a conference of the superintendents of these cities was held with representatives of the State Education Depart-

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ment, and an agreement was reached concerning several phases of the guidance problem. Among other things, the superintendents agreed that these communities should provide placement facilities or else cooperate with some existing public agency in the placement of pupils. Another recommendation was that follow-up studies of pupils who leave the public schools should be conducted at regular intervals. Such moves are in the right direction.

The important thing regarding placements at the present time is to see that the leaving pupils, both graduates and nongraduates, are placed, not who does it. For this reason either the school system, or the New York State Junior Employment Service, or a plan combining the two, should provide placement facilities. Illustrations might be presented showing that the school is doing a good job, or that the service is; both plans have their advantages and disadvantages. Whatever plan is adopted, the school should see to it that the job is done.

It would seem advisable, wherever possible, for the local board of education to undertake a cooperative arrangement with the Junior Employment Service. For example, it would be possible for the schools in New York City to have a close working agreement with the Service. The Inquiry understands that the Service is attempting to develop a plan which will serve the best interests of both groups.

At the present time it would not be advantageous to have all initial placement carried by the Junior Employment Service, for it is not now widely extended and therefore is not capable of assuming the responsibility for the entire State. Moreover, some schools, mainly vocational, are doing excellent placement work. Neither would it be advisable to require all initial placement to be done by the school, particularly in the light of the fact that cooperative arrangements between the school and the service have already been worked out. Furthermore, many general high schools would be unable

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under existing conditions to assume the responsibility. Finally, the employment service in the near future, on account of the provisions of the Social Security Act, may be vastly extended and improved. It will then be more capable of assisting the schools, or even of assuming the entire responsibility.

If the Board of Regents should observe, say for a period of five years, the different methods of performing the placement function, that is, by the school, by the employment service, or by a joint arrangement of the two, and should encourage local experimentation, it would have a sound factual basis upon which to make a decision. Only after careful observation of the various possibilities can a definite program be established. At present it is urgent that the schools become conscious of the problem of placements and that they see that something is done about it.

### *Follow-Up Work*

Follow-up work is an essential part of vocational education. The school should follow the pupil during at least the first eight months of continuous employment or until he is nineteen years of age. Such follow-up work should enable the school to know whether the pupil is becoming successfully adjusted; whether his school training functions on the job; whether he needs additional training; and whether the school program needs revision.

Practically no follow-up work is being done among commercial, home economics, or homemaking graduates. Studies are occasionally made of the graduates of vocational agriculture, and some information is available in vocational schools offering industrial and technical education, due largely to a recent request of the Federal Office of Education. At no vocational school visited by the Inquiry staff was there any interest shown in the systematic follow-up of nongraduates. The study of leaving pupils discloses that the general high schools know less about the pupils' out-of-school

### *Objectives of the Program*

vocational activities than they know about any other matter investigated.

Each school system should be responsible for seeing to it that follow-up studies are made either by the school itself or else in cooperation with some other agency.

It is not recommended that the school *possess* the record, but merely that it should be available. The school may, if it so desires, utilize the services of the Junior Employment Service. If within six months prior to the time a pupil is to become nineteen years old it is apparent that he will not hold a job within eight months, the school should notify the local department of social welfare of the case.

## CHAPTER X

# Types and Nature of the Courses

### INTRODUCTORY SURVEY COURSES

**I**NTRODUCTORY survey courses should be offered in each of the major vocational fields represented within the secondary school program to fulfill Level I requirements. These fields are: (1) agriculture, (2) industrial, (3) homemaking and domestic and personal service, and (4) business occupations, including the clerical and distributive fields. Every pupil should take a sufficient number of these courses, in order to insure an intelligent choice of their subsequent work.

For pupils interested in industrial work the industrial arts general shop, or a series of shop units, might prove to be the most desirable type of training on Level I.

For pupils interested in business education a general course called elementary economic training, suitable for both business and nonbusiness students, should be offered in the ninth grade. This course should be largely descriptive and expository in character. It should not deal with economic theory, but should be an elementary analysis of the business structure and a study of those business relationships common to all types of business activity. Particularly, it should include understandings related to the price system, money management, and generalizations basic to marketing, finance, labor, risk, and production.

The elementary economic training course probably should not be a tryout course, since most of these courses in business have been largely tryout courses in clerical work. A tryout course in clerical work would be of dubious service. It is

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difficult to get tryout experience in stenographic work by studying shorthand theory for a few weeks.

### INITIAL VOCATIONAL EDUCATION COURSES

Courses in vocational education for pupils on Level II should be offered within each of the general vocational fields mentioned in connection with the discussion of the introductory survey courses. A course could not cover the whole of any one of these fields, but it should not be so narrow and highly specialized that the pupil cannot use his training to advantage in more than one type of employment.

The courses should continue the work of the introductory survey courses on an advanced level. For example, business education should be an outgrowth of the elementary economics course. During grades 10, 11, and 12, Business I, II and III should be offered. These courses should include generalizations and understanding concerning the price system, money management, labor, marketing, production, and such problems in business, beyond those given in the fundamental course—elementary economic training.

The present organization of the business course has no central core or distinctive discipline. There is evidence of overlapping between certain subjects, and much of the work in so-called salesmanship and business management is of ephemeral value.

In order to offer one marketable skill in business education, the following courses might be offered during the eleventh and twelfth grades: elementary filing, general clerical practice, routine retail selling, typewriting, switchboard operation, receptionist, etc. It is assumed that the student will not be certified as vocationally adjusted until he has had the basic business subjects plus one of the marketable skill courses. Owing to the increasing importance of such lines of activity, more attention should be given to the service occupations.

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The homemaking course in grades 10 through 12 should give an understanding of and some ability in homemaking, including subject matter from all the major fields of home economics: the family and its relationships, including child care; family economics, with special attention to buying for the family; food and nutrition; the house, its furnishing, equipment, and care, and home management; and textiles and clothing. In addition, certain brief and relatively intense units of training should be provided to round out the courses designed for pupils who wish to secure such jobs as serving in a restaurant or tearoom, counter work in a cafeteria, domestic work, or care of children.

In the industrial field there should be a more extensive use of the broader types of industrial arts courses such as are now given in some general high schools.

In regard to the teaching of marketable skills in the industrial field, it would be impossible to attempt to teach pupils how to run the thousands of different kinds of machinery used by industry. The equipment cost would be prohibitive.

During the final year the vocational industrial pupil might be given a round of the semiskilled jobs most frequently encountered by those who leave school. However, industry should and can train semiskilled labor for specific jobs. The work might be of the multi-occupation type utilized by the Essex County Vocational School or of the type given pupils of low intelligence in the junior high schools in Mount Vernon.

### *Dropouts*

The initial vocational education courses should be planned to meet the needs of the large number of dropouts, as well as of those who plan to graduate. Hence, these courses can be of varying lengths. If only a small fraction of the pupils in a school graduate, the program should be geared to the needs of the pupils. In one vocational school, for example, the enrollment by years was as follows: ninth, 242; tenth, 191;

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eleventh, 73; twelfth, 44. Owing partly to racial factors, there is a considerable number of dropouts in this school at the end of the tenth year, and the school states that it is concerned with its "inability to keep boys in school until they complete the full four-year course." If this situation cannot be overcome, it would seem desirable to adjust the courses to meet the situation.

The testing study of leaving pupils points to the desirability of developing an appropriate vocational program that will meet the needs of dropouts. The study of general high school leaving pupils discloses that the poorer the pupil's accomplishment, the earlier he withdrew from school. The study also shows that the fundamental reason for withdrawal was apparently general scholastic inability, rather than poor achievement in particular phases of school work.

The study of the vocational plans of general high school pupils shows that many of the pupils who withdrew before graduation were clearly not able to stand on their own feet.

The study of the school appraisals of the characteristics of leaving pupils shows that the general high schools know least about the backgrounds of pupils who withdraw before graduation.

On the basis of the interviews with former vocational school pupils, it was obvious that such schools pay considerably less attention to their withdrawals than to their graduates.

#### VOCATIONAL INSTITUTE AND TECHNICAL INSTITUTE COURSES

Courses on Level III, namely, the advanced vocational and technical courses, should be offered in any of the broad fields listed for Levels I and II. For example, the vocational institute might give intensive courses in the business field, in such things as junior accountancy, small-store management, selling which involves knowledge of products and

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processes, machine bookkeeping, calculating machine operation, and stenographic training.

Courses might well be provided to prepare qualified students for positions in the field of commercial food service, such as cafeteria, lunchroom, and tearoom managers; garment and millinery workers, and power machine operators; and, perhaps, beauty parlor operators, if this work is to be placed on a scientific basis. Doubtless other types of courses should be added. Very little attention and consideration has been given by those in charge of trade and industrial education to courses for girls and women in household or other types of personal services. These fields should be studied and courses should be developed along certain lines, not alone for training workers but also for raising the standards of service, especially in the field of food service, where sanitation and nutritional standards are too often regrettably low. Certain hotel training schools hold out alluring opportunities for those who would take specialized training for hotel service—a type of training presumably on Level III. A large fee and more time than is justified by the work given are required of those who are led by the advertisements to take the courses offered by some of these schools.

A variety of courses should be offered on the vocational institute level. These should be short, intensive unit courses designed to meet the needs for specific retraining or upgrading, such as a course in stenography for mature workers. Special unit courses such as are now offered in some places in the field of agriculture for training in mechanics, crop or animal production, or farm management should be given.

Various types of apprenticeship training, as well as part-time cooperative work, could be offered by the vocational institute. In fact, the program offered by the vocational institute should be highly flexible and adaptable to individual needs, varying from short unit courses to longer courses and given in the day or in the evening.

## *Types and Nature of the Courses*

Apprenticeship training has much to commend it, and its program needs to be expanded. It combines work on the job with related instruction in the school. In certain skilled trades it has had a long development and is today the primary means of training such workers. It may have outlived its usefulness in certain occupations, but it continues to be useful in others.

The State Apprentice Training Council presented a report in May, 1937, urging the desirability of further apprentice training. The work of this Council should be further extended and the State Education Department should encourage and aid local communities concerning the establishment of such courses. Active cooperation of employees and employers should be secured for the expansion of this program in legitimate fields. The cooperation of the State Labor Department should be secured in order that adequate labor standards might be maintained. Whether held in the day or the evening, these courses should be entitled to state aid.

The teaching of certain trade skills may take more time than a short unit course affords. In such cases terminal courses of one or two years should be provided for those who have graduated, as well as for those who can benefit by such instruction. Instruction in any of these courses may be offered either on a full-time or part-time basis, of a few weeks or a year or two in length, and in the day or evening. They may be practical shopwork or subjects related to a trade, which will aid the pupil to adjust himself more satisfactorily to his job.

As has been indicated in an earlier chapter, the technical institute should offer courses of a semiprofessional or semi-technical character. In business education, for example, courses could be offered in such semiprofessional pursuits as secretarial work, office management, salesmanship involving technical knowledge, buying, credit management, and other types of financial work. Courses for the dental hygienist, the architectural assistant, the dietician, and the junior engineer, could also be given.

BREADTH OF PROGRAM

The recommended total program should be characterized by breadth and flexibility. The program should be sufficiently broad, so that education for vocational adjustment will be appropriate to each pupil's abilities and needs. There should be a place for those who will enter semiskilled and even unskilled occupations, as well as for those who seek entrance into skilled occupations. The school should offer preemployment education which will help those youths who will find employment as machine tenders, domestic servants, or electricians to become vocationally adjusted. This does not mean that specific training in all occupations should be offered on Level II, but that different groups of pupils should be given an appropriate education which will enable them from the start to adjust themselves easily and quickly to economic life.

All secondary education must show a greater concern with the problem of initial vocational adjustment of all types of pupils. Neither the vocational educators nor the general educators have been willing to assume this larger responsibility.

Some vocational educators have insisted that it is a mistake to merge the aims and functions of general education and vocational education. Such an attitude is based, presumably, on the belief that general education is vague. Excluding the class which intends to go to college, all children should receive a training which will enable them to adjust themselves to their initial employment. This does not mean that all should take the present prescribed vocational courses in skilled trades. This would be undesirable from all points of view. The sooner vocational educators realize the importance of training for initial vocational adjustment all pupils who will terminate their formal full-time schooling with the secondary school the better off these pupils will be.

At the present time, as we have seen, vocational industrial education is primarily concerned with training for skilled

## *Types and Nature of the Courses*

crafts and trades, which narrows considerably the possible fields of training, and in addition introduces inflexibility into the program.

By restricting vocational training largely to intensive skilled training, many pupils are denied vocational education. It would be more consistent with democratic principles and more consistent with the demands of the modern economy, if initial vocational training on Level II were provided for all potential workers. To neglect the large group who do not require highly skilled preemployment training but who would benefit from some vocational education is unwise. Part of the failure to face this problem in the general high schools must be borne by the vocational educators because of their attitude concerning the restrictive nature of a vocational education program.

Furthermore, unless a wise local administration with a broad philosophy of education can develop all types of education for vocational competency, the champions of any one form may, by innuendo and false guidance, prevent the wholesome development of a broad program. Education for initial vocational competency must be safeguarded against becoming the "poor relation" of college entrance education. At the present time, vocational education must not become, as in one city in New York State, the "poor relation"—and a very poor one at that—of technical education. In the same way education for the semiskilled trades must not become the "poor relation" of vocational education for skilled trades.

### FLEXIBILITY OF PROGRAM

Flexibility, as well as breadth, is essential, if the program is to be in tune with the facts of economic life. Flexibility in course offerings, in the content of courses, in requirements of one kind or another is fundamental if the primary objective, successful initial vocational adjustment, is to be realized.

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At the present time inflexibility characterizes some vocational courses, particularly those in the commercial field.

As was pointed out earlier, economic activity is characterized by inevitable and continuous change. Present conditions will not be the same five and ten years from now, therefore our training program must be adjusted accordingly, and re-organized to meet these contingencies.

In developing programs, however, school administrators should not confuse short-time trends with long-time tendencies. For example, cyclical influences in general distort, accentuate, or retard, as the case may be, certain basic tendencies. This distinction between short- and long-time forces is particularly important because school administrators may be urged by interested groups to pursue a policy which would be of temporary advantage to those urging the innovation but which would be detrimental to the best interests of society at large. For example, during the upswing from a depression there may be an expansion of job opportunities in an occupation whose long-run trend is downward. Under such conditions the schools should be reluctant to develop any extensive long-time program in such a field, otherwise they may merely place a heavy burden on the future retraining program.

### CERTAIN ADDITIONAL ESSENTIALS

Because of the very nature of the proposed program, the specific content of the courses offered should be subject to constant revision. Such revisions should be based on careful surveys of the needs of the individuals as well as upon local needs. This dual consideration is important. Certainly no one would contend that the "realistic standards of business and industry" should be ignored, but it should be recognized that primary responsibility of education is to train youth for its own good and not merely to supply industry and business with the workers they want.

## *Types and Nature of the Courses*

Among the various vocational courses, business education seems to be subject to less revision than the others. It is fair to describe the business curriculum in the State of New York as being reasonably static so far as change and modification is concerned. At least this has been true during the last five years. There is little or no evidence to indicate that serious economic and social changes which have arisen during recent years have affected the business offerings in the schools. In response to a questionnaire and also as a result of interviews, school administrators indicated generally very little awareness of the necessity of change in business education. Furthermore, there is little evidence to indicate that any modification of the business program has been made in view of the glutting of the labor market in certain clerical occupations.

It should also be kept in mind that, insofar as possible, individualized instruction should be the primary method of instruction and should be used to the end that advancement may be based on individual attainment. Vocational agriculture attempts to give individualized instruction.

In several of the schools visited, individual pupils, or groups of pupils, were doing quite dissimilar things at a given time in home economics and homemaking. This work is adapted to a considerable extent to the differing skills, abilities, and interests of the students. The shop work in courses in trade and industry was often based on individualized instruction and individual advancement. The use of job sheets and similar devices permitted the better pupils to advance more rapidly and not to be held back by the poorer students. Individualized instruction was not often used in business courses.

In developing courses school administrators should also be free to determine the proper amount of time that should be devoted to teaching any part of a course. Even the present vocational trade and industrial courses should not be predicated on an arbitrary distribution of time between shop-work and related technical and general subjects. The pro-

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cedure should be to permit the school to make the most effective utilization of the pupil's time that is possible, and not to conform to any standard pattern.

### LOCAL PROGRAMS

If local communities are to offer the most effective programs for vocational adjustment they should carefully plan their programs. In order that this shall be done no new fields should be introduced on Levels II and III with state aid until the local school has complied with the requirement of the State Education Department that it submit evidence of necessary preliminary planning. When the program and the supporting evidence is properly presented in a form specified by the Department, the local school should be given state aid. If the local school has satisfied the requirement of preplanning, the State Education Department should accept the program.

Job analyses are a logical first step in the establishment of any new course. Without such basic data it is impossible to develop an appropriate program.

When visiting vocational schools and talking with vocational educators, one frequently heard the statement that "vocational schools determine their course offerings on the basis of local needs." Yet there is practically no data to verify this statement. So far as could be determined, no community in the State had made continuous surveys of local needs, yet such investigations are especially important if the number of pupils pursuing an education leading toward initial vocational competency is to be increased.

Only occasionally are local studies made in vocational trade and industrial education. Since the program in business education is fairly uniform throughout the State, it is apparent that commercial departments have made very little adjustment in the program to meet the particular needs of different areas. So far as could be determined, comparatively little research is

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being conducted in terms of job analysis, long-run trends, or searching examination of the clerical labor market.

The courses in vocational agriculture are based upon the major and minor farm enterprises in each school patronage area, which means that the teacher of agriculture must ascertain the relative importance of the several farm enterprises in the district.

Although the employment opportunities for individuals trained in homemaking skills vary with the community, in practically none of the schools visited or reported to the Inquiry has any organized effort been made to determine the needs of the community for individuals so trained. Repeated reference, in the returned questionnaire sent to the principals, is made to the fact that girls who have had home economics are working at household employment or at work in which household skills and abilities are valuable. One teacher commented, "We do not place a vocational emphasis on the course [homemaking] for few of our pupils go into employment requiring such training." Yet in the next section of the questionnaire she reports that four out of eight girls who graduated in June, 1936, were employed in household work or work closely related to it.

It was stated at the beginning of this discussion of local programs that the program for new fields should be submitted to the State Department in a form specified by the Department. If this is done, the Department should accept this as evidence of necessary preliminary planning. It should be noted that the statement advisedly uses the word "accepted" and not "approved." Approval would imply conformity with a pattern determined by the Department. This would be inadvisable—witness the uniformity of business education courses throughout the State.

Each local board of education should be permitted to determine its specific program in the light of its ability to attain its objective of vocational adjustment. Not prescribed courses

## *Education for Work*

of study, but desirable buildings, equipment and supplies, adequate teaching and administrative facilities are the essentials through which a successful program will be developed. The State may suggest courses of study, but it should not require communities to accept them as a prerequisite for state aid.<sup>1</sup>

### NEED FOR BASIC PRINCIPLES IN SELECTING COURSES

The Inquiry staff was informed that the State Education Department has never attempted to establish any standards relative to the types of vocational courses to be offered, other than those contained in the Education Law. The law states that "the controlling purpose . . . shall either be the preparation or else the improvement of the pupils enrolled therein for useful employment in trade, industrial, agricultural, commercial, or homemaking economics." No attempt has been made to define "useful employment."

Recently the problem of determining the types of distributive courses which should be developed as a result of the George-Deen Act has arisen. It seems advisable to repeat what has been stated earlier, since it explains the basis advocated by one school administrator. Here is the advice given in January, 1937, to the annual convention of the National Retail Dry Goods Association by a principal of a vocational school, speaking in place of a representative of the State Education Department. "We are spreading the good news [*i.e.*, regarding the George Deen funds] and those who come first will be the first served."<sup>2</sup> It is because of such attitudes as this statement expresses and because of the absence of any consensus of opinion concerning the introduction of

<sup>1</sup> The situation regarding the college entrance course is beyond the scope of this report.

<sup>2</sup> *The New York Times*, January 23, 1937, "Schools to Insist on Aid of Business." This statement was subsequently verified through personal interview.

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courses that local districts should agree upon basic principles to aid them in evolving a socially desirable program.

The following principles are suggested for consideration in establishing courses on Level II and Level III:

1. The occupation should be sufficiently stable and mature in order to permit accurate judgment as to what the labor demands are likely to be. It should not be one which has not had an opportunity to demonstrate its maturity, nor one which is declining rapidly and promises soon to become obsolete.
2. Employment in the occupation in question should be sufficiently large to make the introduction of the course practicable.
3. The occupation should be one which offers a considerable amount of employment during a year. This would exclude an industry which provides jobs for only a few months and leaves the worker stranded the remainder of the year.
4. The occupation should be one which pays reasonable wages. Support should not be given by public education to industries which pay notoriously low wages.
5. The occupation should be one in which there is an opportunity for individual advancement in skill and knowledge.
6. The occupation should be one in which there is a reasonable certainty that at least approximately 75 per cent of the trainees will be successfully adjusted in the occupation and remain content in it.
7. The occupation should be one for which the training is of such a generic character that a pupil can shift from one type of employment to another without appreciable loss of the training received.
8. In the selection of courses due consideration should be given to the differences in individual aptitudes, capacities, and desires.

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9. The occupation should not be one in which there is a rapid obsolescence of expensive equipment.
10. The occupation should not be one in which the work processes are subject to rapid obsolescence.
11. The occupation should not be one in which proper facilities for learning the occupation are already available in sufficient quantity in the community.
12. The occupation should not be of such a monopoly character that the pupil cannot easily transfer his training to other types of employment without losing the value of his training.
13. The occupation should not be one in which artificial barriers make it extremely difficult for the pupil to enter the occupation, or to secure adequate recognition for the work done in the school. An examination of the present offerings in vocational industrial education would disclose a few courses which would be eliminated immediately if this principle were put into effect.

### ADVISORY BOARDS OF VOCATIONAL TRAINING

If local school districts are to develop a variety of courses they should avail themselves of every opportunity of securing assistance from those persons and agencies in the community that are acquainted with local conditions. One of the most effective means of utilizing local experience is through organizing advisory boards of vocational training, and school districts are urged to create such advisory boards, if none are in existence at present.

An advisory board can be of aid to school administrators on such matters as the introduction, elimination, or major revision of courses, the planning of buildings, or the purchasing of appropriate equipment. Such boards can be indispensable in developing apprenticeship courses and in encouraging young persons in industry to take retraining work. Where

## *Types and Nature of the Courses*

vocational industrial schools have at the present time active advisory boards the schools have benefited greatly. Through the character of the work being done in such schools, the nature of the equipment, and the timelessness of the programs, these boards were conclusively demonstrating their usefulness as an effective tool for providing community cooperation. Of all the devices for making community contacts the Inquiry staff was impressed most with the possibilities of the advisory boards. There were a few centers in which ineffective boards were found. There was at least one center which did not have a board, in spite of the expressed provision of the Education Law, but, on the whole, it was gratifying to find in operation such an effective tool for providing community cooperation.

A board should be made up of persons interested in the various types of instruction, and at least one member should represent employers and one employees. In the case of agricultural courses, it would be advisable to have the following types of individuals on the committee: farmers, the county agricultural extension agent, farm organization representatives, and official representatives of other important county and local organizations responsible for improvement of farm practices and rural life. For each trade or occupation taught, it would be advisable to have a special subcommittee to represent employers and employees in that trade or occupation.

### ADVISORY BOARD ON SOCIAL AND VOCATIONAL ADJUSTMENT

Each local school district should consider the advisability of establishing, through its board of education, an advisory board on social and vocational adjustment, responsible directly to the local board of education. Such a board should prove of inestimable value to a local board of education in attempting to meet the problem of pupil adjustment to life. The point might be made that the work of such an advisory

## *Education for Work*

board is a prerogative of the board of education itself. Whatever may be the case, local boards of education do not always contain such technical representatives in their personnel. Furthermore, boards of education would benefit by the advice and assistance which such a diversified group could render. A board of this character would enable all the qualified agencies in the community to contribute the richness of their experience to the educational problem.<sup>3</sup>

This board should be composed of the chairman of the advisory board of vocational training (if such a board is in existence in said district), a representative of the local public health department, a representative of any existing local social agency, a representative of the local churches, and two or three other persons representing the public at large. In addition, there should be included, whenever possible, a representative of the State Junior Employment Service, a representative of a local character-building agency, and a representative of the local courts, preferably the Children's Court.

<sup>3</sup> "Youth—How the Communities Can Help," United States Department of the Interior, Office of Education, Bulletin No. 18-I, 1936.

## CHAPTER XI

### Where the Program Should Be Offered

IN WHAT types of schools should the program outlined in the preceding chapters be provided at the secondary level? In terms of the total program, training on Levels I, II, and III cannot be the exclusive concern of any one type of school. It will be necessary to utilize the type which best suits the purpose of the course and the size of the community.

#### INTRODUCTORY SURVEY COURSES

Introductory survey courses should be available to all seventh, eighth, and ninth grade pupils in New York State, and wherever possible should be offered by each school enrolling pupils in these grades. This plan calls for a much wider offering of such courses than is found at the present time.

#### INITIAL VOCATIONAL EDUCATION

Courses in initial vocational education should be available to all pupils of grades 10 through 12 and may appropriately be given in cosmopolitan high schools.

At present, various types of schools offer instruction in industrial arts, vocational industrial, vocational technical, vocational agricultural, commercial, and home economics and homemaking. Commercial education is given in almost all types of high schools found in New York State. Homemaking and home economics are also offered in various types of schools. Vocational agriculture is confined largely to the general high school. Industrial arts courses given in grades 10 through 12 are confined to similar types of schools. While only four of the twelve schools giving vocational technical

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courses are separate schools, these four enroll about 90 per cent of the technical enrollees in the State. Only a small percentage of the pupils taking vocational industrial work are enrolled in general high schools. Even when this work is given in the general high school there is a tendency to separate vocational and nonvocational pupils.

Vocational trade and industrial educators maintain that their courses should be given in specialized schools. The reasons for this practice are partly historical and partly due to the nature of the program. Early opposition to this introduction and the special organization of such courses, as well as the present attitude of many local, state, and national vocational educators favoring separation, account for the segregation of these pupils. However, there are certain adverse as well as favorable effects of segregating vocational students and teachers from the rest of the secondary school population.

The effects of the segregation characteristic of the present program of vocational education were carefully weighed by the Inquiry staff. The fundamental shortcoming of the policy of using separate schools seems to be the mutual disesteem in which the vocational and the nonvocational educators hold each other. Rather than encourage the development of a unified system of education, obligated to serve the needs of all types of children, the separation has made vocational education an entity in itself. The Inquiry staff believes that the time has come when initial vocational training should be made an integral part of the general educational system. Kindred subjects, whenever and wherever taught, should be under the general supervision of one administrative head. If this plan is put into effect, many of the apparent distrusts of the vocational educator concerning work in the general high schools will be minimized if not obliterated.

Besides those classes training in marketable skills, the location of which will be discussed shortly, the program leading toward initial vocational adjustment, as conceived in this

### *Where the Program Should Be Offered*

report, should be located in cosmopolitan high schools, for this training constitutes an integral part of the secondary program. Such training should not be construed as a distinct and separate type of education, to be relegated to special schools with the result that thousands of pupils are denied such training. Furthermore, if training for initial vocational adjustment is made a part of the total program, separation is economically impossible in most communities. It is the belief of the Inquiry staff that training for initial vocational adjustment should be a part of the training for life. To include this training in the secondary school program the curriculum needs to be fundamentally revised. It is not enough merely to add courses to existing offerings. This report does not maintain, however, that all pupils who will terminate their formal full-time education with the secondary school should turn to the present program of vocational education and be encompassed within its fold. The best part of both vocational and so-called general education should be fused into a vital and practical program which aims to offer the greatest good to the greatest number.

### *Marketable Skills*

Classwork organized for the purpose of developing marketable skills and taken at least during the pupil's final year may be given in the cosmopolitan high school or in cooperation with other schools, perhaps the vocational institute. If possible, these courses should be offered in the cosmopolitan high school, since they bear an exceedingly close relation to the work given in the lower grades. If the nature of the equipment is such that it would be more economical to concentrate it in a few schools rather than duplicate it in many, the second alternative may be the better plan for some places. Under such a plan a wider variety of equipment might be made available at a financial saving to the schools. Besides eliminating the unnecessary duplication of expensive equip-

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ment, greater utilization of the equipment might be secured, thus reducing the per-pupil equipment cost.

As a matter of fact, some marketable skills might be learned on the job itself—in industry or business. Also, part-time cooperative arrangements might be developed which would provide the pupil with the desired experience. The pupil should sometimes be credited with the work done on the job. In fact, an arrangement of this character might serve very well to articulate the work done in school with the subsequent adjustment on the job, making the transition less abrupt than it is at present for many young people.

### VOCATIONAL INSTITUTES AND TECHNICAL INSTITUTES

Vocational institute and technical institute courses given in large school systems may be more effectively developed in separate schools than as a part of a cosmopolitan high school. With regard to the smaller school systems, these courses may properly be developed either as an addition to the program of a comprehensive high school or in a separate school serving a number of school districts.

Wherever feasible, separate schools are suggested for vocational institutes and technical institutes. Although there will be some overlapping in the ages of pupils in grades 10 through 12 and in institutes, the pupils in the latter will on the whole be more mature. Since the vocational institute students are required to have had work experience while the latter are not, there is, perhaps, a better reason for their segregation than for the segregation of technical institute students. In both types of institutes, however, fewer pupils will be enrolled than are enrolled in secondary schools, hence fewer schools will be needed and economical advantages may dictate separate schools.

Naturally, most, although not all, of the institute courses should be given in the areas where such work is located.

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Urban communities, and their surrounding areas, should be the principal centers for programs in commercial education aimed to develop vocational skills. In 1930 about 80 per cent of the gainfully employed clerical workers were located in four cities.

Even though some types of jobs are concentrated in certain areas, the present arrangement, whereby only certain vocational courses are offered, results in grave inequalities of opportunity for pupils who wish to pursue other types of vocational education.

### PRESENT INEQUALITIES OF OPPORTUNITY

One of the conditions encountered by the Inquiry staff was the inability of youths in some communities to obtain certain types of vocational education, especially industrial and technical education. Approximately 90 per cent of the boys in industrial and technical education are enrolled in the classes of two cities. Furthermore, nonresident pupils are seldom found in these fields. Most of the principals of trade and industrial schools reported that nonresidents were admitted infrequently. The reason seems to be that no legal obligation exists to force school boards to provide the training, and vocational industrial schools, at least in the large cities, had capacity enrollments from resident families. Since these schools are for the most part in large cities, thousands of pupils in the State are denied this type of education.

In 1937 the State Education Department issued a bulletin, *Approved Vocational Schools of Secondary Grade Open to Non-residents*, giving the courses in certain cities of the State which are open to nonresidents, but the reports from principals of industrial schools to the Inquiry stated that less than 9 per cent of the total enrollment was made up of nonresidents. This computation excluded New York City which does not admit nonresidents. In contrast, from two-thirds to three-fourths of the pupils in vocational agriculture in the fifty-seven schools

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reporting to the Inquiry were nonresidents. There does not seem to be any serious difficulty for nonresident pupils to enroll in commercial or homemaking or home economics courses.

Because of the apparent difficulty of nonresident pupils to take industrial courses and because of the centralization of such work in large cities, rural youth, young persons in small communities, and young people in certain political subdivisions bordering on concentrated industrial areas, are virtually prohibited from obtaining this type of instruction.

### *Suburban Youth*

The lack of facilities for industrial education is acute in certain political subdivisions bordering on concentrated industrial areas. The most important population movements within New York State during the 1920's was migration to the suburbs. During the same period these areas increased in relative importance with respect to manufacturing wage jobs. Hence, it is to be expected that some of them would show concern regarding vocational education programs.

### *Rural Youth*

A rural youth may have the opportunity in his locality to take work in vocational agriculture, home economics, or business education, or he may be able to attend such courses in neighboring communities. In these three fields nonresident pupils are generally admitted. This is not true, however, of trade and industrial and technical fields.

There was considerable evidence collected, in connection with the study of vocational agricultural education, to indicate that a certain amount of training for initial vocational adjustment in the industrial field would be desirable in rural communities. Nineteen of the fifty-seven principals stated that it has recently been necessary for them to admit to agricultural courses pupils who were not suitably qualified for this work.

## *Where the Program Should Be Offered*

But there is additional evidence that some training in trade and industrial work might be of advantage to rural youth. The number of persons residing on farms in New York State declined from 921,656 in 1910 to 720,000 in 1930. This trend away from the farms, which was pronounced for a long time ceased in 1930, and from 1930 to 1935 there was a movement back to the farm. Since 1935 a decline has again set in. This almost continuous decline in farm population has meant that many farm people have changed to other kinds of work.

Since 1919 there has been in New York State a net migration of about a quarter of a million men and boys from farms to other places of work. All these people would have benefited from an opportunity to acquire training that would have prepared them for their new occupations, but the greater part of this training should, of course, have been received after they had migrated.

The United States Employment Service has accumulated evidence to show that the majority of persons with an agricultural background who have registered with the Service are seeking work in the industrial and commercial fields rather than in agricultural and related types of activity.

Eugene Merritt, Senior Extension Economist in the United States Department of Agriculture, states in a pamphlet entitled, "The Opportunity in Agriculture for the Farm Boy":

. . . three out of four of these young people [on the farms] ultimately will have to develop some skill in non-agricultural occupations. Therefore, they are interested in the outlook for the different nonagricultural occupations as well as in what training and experience are necessary to succeed in these occupations.<sup>1</sup>

For the various reasons mentioned above, rural youth should be provided opportunities for vocational training in nonagricultural vocations for both full-time and part-time employment. At present, they are denied such opportunities.

<sup>1</sup> Eugene Merritt, *The Opportunity in Agriculture for the Farm Boy*, p. 1. Extension Service Circular 264, United States Department of Agriculture, May, 1937.

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The situation might be helped if agricultural courses gave more attention to the problem of training in such things as farm mechanics, farm carpentry, farm plumbing, farm electricity, and the like. Such training would be of value not only to the boy who remains on the farm but also to the youth who might later migrate.

Young persons residing in other than the largest communities in the State are also denied the opportunity of vocational industrial and vocational technical education. In 1935-36, ninety-seven out of a total of one hundred and ten communities with a population of 5,000 or more were not offering courses in these types of education.

### REGIONAL INSTITUTES

It would probably be economically impossible for many small communities to offer vocational institute and technical institute courses in segregated schools in each school district. For this reason a separate school serving a group of school districts is suggested. From the point of view of the social needs of the entire State, the time honored method of developing vocational education programs through local school boards, which has given rise to certain shortcomings in most of the state programs, seems slow, laborious, and provincial. This situation might be corrected if a group of school districts developed cooperatively a program.

Certain communities in the State have already expressed an interest in such a project. There has, for example, been some interest in the development of county vocational schools. Several counties have studied the problem of providing vocational training on a county-wide basis, but as yet no county vocational school has been established. From time to time several bills dealing with county vocational schools have been presented to the General Assembly.

The State should amend the Education Law to permit the development of vocational institutes and technical institutes which can serve more than one school district. The area to

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be served should not be confined solely to a county, for there is no reason to suppose that the county is necessarily the proper unit for such schools. At present it is not an administrative unit for general educational purposes. Nor a social or economic area, but a political unit. To limit such schools to a county basis would unduly restrict the development of a desirable unit. For example, the county plan would not assist adjacent communities in separate counties to plan cooperatively. They would be forced to secure a special act of the legislature, if they wanted to organize a vocational school. Plans for developing a regional school should be flexible. Such a school should probably be built up by existing, or revised, school districts rather than by the county.<sup>2</sup>

These regional schools should be so organized that the administration is carried on by the local school districts and not by the State. The state schools of agriculture, which will shortly be discussed, are the exceptions.

Even though vocational institute and technical institute courses are developed in other than the largest cities, it may prove advisable to offer them as a part of the comprehensive high school program in small communities rather than to establish separate schools. The vocational staff of the Regents' Inquiry found that separate vocational schools were less successful in small cities than in large ones. In any community of less than 50,000 population, the comprehensive high school should be utilized. This would mean then that the regional school might advisably be a department of an existing high school. If the plan of using departments rather than separate schools is accepted, it would be possible for New York State to experience a tremendous expansion in the program among small communities.

Part of the opposition to regional vocational schools is voiced by city vocational directors who fear that schools in suburban areas not under their control may flood the market

<sup>2</sup> For further details on the proper unit, see A. G. Grace and G. A. Moe, *State Aid and School Costs*, Regents' Inquiry, 1938.

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with workers and undermine the confidence which labor has in the schools as protectors of supply and demand, but it should be possible for educators to come to an agreement on the matter. Additional opposition may come from school principals in areas where the school population is stationary or declining, who fear that the development of a regional vocational school will adversely affect their enrollments.

### STATE SCHOOLS OF AGRICULTURE

The recent development, noted earlier, of industrial institute and technical institute courses in four state schools of agriculture deserves comment. While this may be one way of partially meeting the needs of those living in rural areas, when adequate equipment and personnel are provided, using state schools of agriculture for this work has certain serious limitations. The program cannot be extensive, confined as it is to such places. The total proposed program provides for only 240 potential students. And if these programs were expanded to any great extent, the location would be a serious handicap, for they are located in small and, in most instances, isolated places. These schools were established for agricultural education, and hence any industrial or technical program confined to them would be seriously handicapped. They would not, of course, meet the needs of suburban pupils who wish instruction.

Rather than cater to local needs, some of the proposed programs in these state schools of agriculture are evidently intended to satisfy the needs of the State as a whole. For example, a course in watch and clock repairing, open to forty pupils, is to be given in one state school of agriculture, located in a village of less than 600 people in the center of the State. This course is obviously not intended for local or even regional consumption. Over 70 per cent of the engravers and watch and clock repairers in the State are located in one city. Those who want technical training in industrial

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chemistry on an institute level must go to the extreme northern border of the State, hundreds of miles from a large chemical center. These illustrations show the problems that arise when the state work, obviously intended to serve more than any local or even regional area, is restricted to state schools of agriculture.<sup>3</sup>

Furthermore, it is questionable whether some of these schools which are poorly equipped should attempt to do work which could be done much better by the schools in large communities which are already better equipped.

Also, if the State attempts to expand its program by establishing regional schools in other areas, especially large suburban cities, then part of the local program for vocational adjustment would be completely under the control of the State Department, while another part of the program would be under local administration. Since a local program should be integrated, it should in so far as possible be administered as a unit. This can be accomplished much better if local districts or groups of districts expand their existing educational programs than it can be if the State establishes its own schools. Such an expansion of the local program is in accord with the plan of local responsibility for the problem of vocational adjustment.

<sup>3</sup> This criticism does not apply to such courses as automobile repairing, which can serve the needs of youth in the region surrounding one of these schools.

## CHAPTER XII

# State Education Department and Vocational Adjustment

IN ORDER that the program outlined in the preceding chapters may be most effectively realized, the State Education Department should (1) conduct research, (2) render a variety of services to local school districts, (3) approve school facilities, (4) grant financial aid, (5) develop an adequate teacher training program, (6) maintain cooperative relations with various state departments and other agencies, (7) secure the modification of the existing compulsory part-time continuation law, and (8) discontinue the Regents' Examinations in all types of vocational and quasi-vocational courses.

### RESEARCH

Research should be one of the primary functions of the State Education Department. It is a necessary requisite if an educational program leading toward successful vocational adjustment is to be realized. Much of this research is of a kind that cannot be left to individual communities. Moreover, they are not able to undertake it, for they have neither the funds nor the personnel for some of the work. A considerable amount of the desired research concerns the entire program in the State, and is therefore of more than local interest. The most economical plan would be to have the State rather than innumerable local agencies pursue such investigation. Such a plan would not place the burden of developing material which should be of use to all localities on a single local community. If certain types of research need to be made by the

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local district, the State can still render invaluable aid of one kind or another.

At the present time only fragmentary research is being conducted by the State Education Department. This is not due necessarily to inadequate personnel, but because sufficient attention and funds are not given to this work. As long as certain important research activities are left to administrative departments, adequate attention will not be given to them, for these departments are heavily burdened with administrative duties which require immediate consideration.

Several types of research should be carried continuously by the State Education Department.

1. The Department should conduct surveys of the long-time needs of vocational training in the State. This requirement is inherent in the basic law. The Department should make continuous studies of occupational demands, with regard to both the human abilities and characteristics needed and the changing nature of occupations arising from technological developments. Research along the lines just discussed is necessary if vocational training is to keep abreast of reality.

The Department should carefully estimate the ability of the State to absorb the pupils leaving schools from different courses. This will aid the localities in devising a program which will be in accord with economic and social trends. Such estimates are especially necessary if larger numbers are to be trained for vocational adjustment. Current placement statistics do not reflect long-time needs, since they are influenced by cyclical factors. Furthermore, what is needed as a basis for determining the courses to be offered is a forecast of probable openings and not simply a review of past experience.

2. The Department should also make continuous studies of the basic abilities required in a wide variety of trades, in order to determine the type of student who will be successful in these occupations. The job analysis and the job specification are prerequisite both for scientific selection of the student and

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for the accurate determination of course contents. It seems inconceivable that a program of vocational training should not include as one of its basic requirements the accurate and scientific determination of job content. Observation and the experience of trade teachers are helpful, but cannot take the place of scientific tools of analysis.

This type of research work should be carried on by the Research Division, not merely for one type of activity but for all—home economics, business, agriculture, trade and industrial, and technical education. Wherever possible, the results of job analyses, made by other agencies, should be given wide publicity by the State Education Department.

3. The Department should also conduct research in the methods of selecting students, or in admissions, so that local school districts may utilize the most modern means possible in placing students in their courses, and thus avoid the social waste prevalent at the present time. The Department should furnish sample forms of appropriate tests for admission purposes, and should publicize the work being done by particular schools or school districts.

From time to time careful studies of the effectiveness of selection programs in sample communities should be made by the Department.

4. The Department should endeavor to determine the best tests of individual accomplishment for the local schools to use in judging the effectiveness of existing methods of instruction and as a means of checking the extent to which the school is accomplishing its objective in training for vocational adjustment. The results of such investigation should be supplied to interested school districts.

5. The Department should collect accurate statistics on such matters as the number of pupils being trained in each type of course as well as the number leaving each course.

The difficulty of obtaining accurate statistics on certain phases of work is too serious to ignore. A special statistical

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volume of nearly 400 pages is issued each year, but it is questionable whether this report should be published unless the figures can be used with the understanding that they are reliable.

There should be a central statistical bureau interested in the compilation of adequate and accurate statistics for all purposes. Such a bureau would not necessarily be the sole agent for sending blanks to schools. Individual bureaus could still distribute special forms, but these should first go to the central statistical bureau for approval regarding makeup, and in order to insure that the information is not already being collected by another bureau. If this were done, more accurate statistical information would be available and possible at a lower cost than is true at present.

6. One important part of the research activity of the State Education Department should be the continuous appraisal of the educational program in the State. The Department should make studies of the effectiveness of testing programs, admission policies, the extent to which pupils are becoming adjusted, and follow-up surveys of leaving pupils. Such studies should be conducted for the purpose of finding out the extent to which various schools are reaching their objectives and of enabling the Department to assist localities regarding methods of improving and evaluating their programs. Complete annual surveys of all phases of all programs would be out of the question, but certain aspects of the programs in certain localities should be investigated each year. The results of these studies should be relayed to the schools and used as a basis for desirable changes.

7. From time to time the State Department should hire qualified specialists to make special studies.

8. There should be attached to the Research Division of the Department a trained economist, who has an advanced degree, and who shall be responsible for research in the fields of occupational trends, job requirements, and such other

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economic and social factors as may contribute to the development of a sound program.

### SERVICES TO LOCAL SCHOOLS

The State Education Department should advise local schools concerning such matters as the nature of courses to be offered and the content of courses. It has a primary responsibility of aiding local communities in every possible way in selecting and modifying courses. The Department should also maintain an active field service which school administrators can consult when they need help.

At the present time valuable and far-reaching contacts are maintained with teachers and supervisors in most of the vocational fields. However, lack of an adequate staff (there is only one supervisor) has resulted in inevitable neglect of the business training program. It is difficult to see how the supervisor can carry more work than he is carrying at present, but more attention should be given to the business-training program. The industrial arts program has for similar reasons received somewhat less attention than it deserves. There is only one supervisor for industrial arts, although the number of teachers and pupils in this field is probably greater than in home economics and most certainly is greater than in agriculture, where more assistance is available. It is impossible for this supervisor to devote sufficient time to field work under the present plan.

The Department should encourage local districts to make surveys of local needs for vocational training periodically. Such surveys would satisfy the requirement made earlier regarding the introduction of new courses on Levels II and III.

The Department should assist school districts in planning local surveys (1) by supplying information on how such investigations should be conducted, (2) by distributing the results of such studies in other localities, and (3) by offering the assistance of state officials for the guidance, but not the

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execution, of these local investigations. The Department could develop a general outline, a plan of procedure, and sample forms and questionnaires, which localities might use. The communities themselves should actually make the surveys and develop the educational plans.

Such local surveys would be valuable in that they would require local or regional administrators to evaluate their programs periodically. As needs for educational service change, facilities and equipment also change. Lines of administrative authority that previously were advisable may become inadequate and unworkable. One of the weaknesses in many vocational schools is the present lack of adequate administrative help. This fact partially explains why these schools have not been able to perform all the services which the schools realize should be done. A local survey would disclose these shortcomings and enable the community to formulate a desirable plan for vocational training.

Courses of study must be continuously revised, or they become obsolete. There is, therefore, a need for constantly revitalizing local or regional programs.

Because of the wholesome effect which can be derived from a local or regional survey, it is worth while to enumerate in detail some of its major advantages:

1. It will compel local or regional administrators to evaluate the objectives of their programs.
2. It will encourage school administrators to understand more clearly the needs for training in their communities.
3. It will stimulate closer cooperation with employers and employees.
4. It will assist local administrators in maintaining adequate materials, equipment, and supplies.
5. It will bring local or regional programs in closer harmony with the state program.
6. It will raise the standard of service rendered in many localities.

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7. It will present a challenge to the local or regional leaders to meet adequately their educational responsibilities to the youth of their communities.

8. It will help to correlate the various phases of the program, and to present a completed picture of the immediate and future situation.

Local districts should be strongly urged, but not required, to make a continuous survey to find out if they are meeting their objectives, and they should be required to make such a survey at the time new courses are introduced on Levels II and III.

The service work and the research work of the Education Department should be coordinated. Advice given by state officials should be based on factual evidence, while departmental research can be guided by the experience of those State officials who are actively in the field.

### APPROVAL OF SCHOOL FACILITIES

Each local school district should be permitted to determine its own program in the light of its ability to attain its objective. The State Education Department should merely require that the district provide desirable buildings, equipment, supplies, adequate teaching and administrative facilities, in accordance with established minimum standards, and make necessary reports of its activities. A state prescribed course of study is of little use if there are not, to take only one factor, sufficient supplies. All too frequently, vocational classes, visited by members of the Inquiry staff, had inadequate, antiquated equipment or insufficient supplies, or both.

The Department should establish appropriate rules and regulations regarding the essentials of the program mentioned above, and these rules and regulations should be rigidly enforced, even to the extent of depriving local communities of state aid when in the judgment of the Board of Regents these rules and regulations have been violated.

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As far as could be determined, state funds are seldom withheld if a local district does not maintain adequate equipment and supplies, in spite of the expressed provisions of Section 610g of the Education Law which states that

If . . . a board of education fails or refuses to provide the teachers, supplies and equipment deemed by the commissioner of education to be necessary for the giving of the instruction required by the approved courses of study, he shall withhold from the moneys annually apportioned to the city or district an amount equal to that which such city or district pays in salaries to the teachers of vocational subjects, guidance, practical arts or adult education classes.<sup>1</sup>

### STATE AID

State aid for any approved public secondary school should be granted upon the basis of the chronological age of the pupil and should, of course, be proportionate to the amount of instruction provided, but appropriate aid should be granted irrespective of whether the course is given full-time or part-time, or in the day or in the evening.

No course should be discriminated against in the matter of state aid. Each part of the broad program outlined in this report is of equal importance in the adjustment process. A pupil who leaves school and needs an upgrading course to aid him in his initial adjustment process is entitled to the same consideration as another pupil who remains in the secondary school and is taking a course which will aid him in his initial adjustment. The time when this work is given is of little importance. It makes no difference whether it is in the day or in the evening. The primary thing is the education itself. As we have seen, one of the reasons for the underdevelopment of evening trade extension classes is probably the absence of state aid for this type of instruction.

Because of the fundamental importance of an adequate testing and guidance program, and because such programs

<sup>1</sup> Education Law, No. 1095, p. 234, July 1, 1936.

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are not at present generally found, it would seem advisable for the State to give state aid for this work at least during the initial stages of the development of these services. A guidance program is the center of the program outlined in this report. It will be virtually impossible to develop any effective program for initial vocational adjustment unless there is a sound testing and guidance service.

As has been indicated, a local school district should not be deprived of state aid if it maintains the essentials of a program. The type of program offered should be the province of the local school district. As long as the school maintains the essentials, it should be permitted to develop whatever program it believes fits its needs or enables it to meet most successfully the problem of vocational adjustment.

No new fields should be introduced with state aid, until the local school district has submitted its program in the form specified by the State Education Department and the program has been accepted by the Department as evidence of preliminary planning. This does not mean that the program must be approved by the State Education Department, but only that the evidence of planning is presented in accordance with the form required. If the locality makes a careful study of its educational needs, in accordance with a procedure formulated by the Department, it should be permitted to develop its own program. The important thing is that the community should survey its educational needs, and not that its program should conform to what the State Education Department may desire.

Furthermore, the State Education Department should have the right, after due notice, to call for an outline of the program in any specified field, and to withdraw state aid if the program is not submitted in such form as gives evidence of necessary planning. Again the emphasis should be on planning by the community, that is, on an evaluation of its program.

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### AN ADEQUATE TEACHER TRAINING PROGRAM

No school system can operate successfully unless it has an adequately trained personnel. In order that this may be realized, the State Education Department must encourage in every possible way the development of an adequate teacher training program for teachers dealing with the problem of vocational adjustment.

1. Professional training in the field of vocational adjustment should be given in approved institutions, either public or private. It would seem that the important consideration is not whether the training is given in a public or private institution, but rather whether the work is being done effectively. For this reason, the program should not be restricted to, say, public institutions.

The State should establish minimum standards for approval of a training program, to be complied with by all institutions desirous of giving such training. Simply that an institution is a public one, is not justification for the continuance of a teacher training program unless it maintains approved standards.

One provision should be the requirement of apprenticeship teacher training as a definite part of the program. Another stipulation should be that these approved institutions, if they accept the responsibility of training teachers, should assume the obligation of maintaining a regular field contact with all graduates for one year after graduation in order to be certain that the teacher is becoming adjusted to his teaching. The State Education Department should require an annual report from each training institution, including among other things information on placement and follow-up work.

2. Once the State has established adequate minimum standards for approval of training programs, it should assist these institutions in every way possible by preparing useful material dealing with such matters as the problems being

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met by teachers, by distributing the results of special research, and by maintaining close contacts with the institutions.

3. The accrediting of the work given in industrial arts at the State Normal School at Oswego should be placed on the same basis as that given at the Buffalo State Teachers College.

4. The business teacher training program at the Albany Teachers' College should be reconstructed so that the work in this field can include more basic business subjects. For example, more work in marketing, finance, statistics, business organization, should be offered. At the present time, too many of the courses given are clerical and secondary in nature. To fulfill adequately the obligations involved in the training of business teachers, the Department of Business Education at the Albany Teachers' College should have standards equivalent to those schools of business which are members of the American Association of Collegiate Schools of Business.

5. Four recommendations concerning a teacher training program in the field of vocational industrial education are made:

a. The State should establish a teacher training institution in New York City to train undergraduates. The City has the largest vocational industrial program in the United States, which is available as a laboratory of practice and observation teaching. The New York City Board of Education has expressed interest in the present teacher training program. The New York City school system offers a large selection of well-trained and experienced candidates for the teacher training faculty. The majority of vocational industrial teachers in the State are needed in the metropolitan district.

b. At the present time summer school classes in vocational industrial work are given in the State Normal School at Oswego. It seems unwise to ask the teachers of New York City, where the largest program in the country is located, to travel over 300 miles to Oswego to attend this summer school.

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A summer training program should be established in New York City under the direction of the proposed vocational industrial teacher training institution.

c. The State should recognize the need for retraining vocational industrial teachers because of the changing nature of the occupations which they teach. As part of a retraining program, provision should be made for teachers to attend periodically, as part of this professional improvement work, courses under expert leaders in the technical phases of their trades. In addition, the state certification plan should make some provision to help teachers to be adaptable when it is found desirable to modify programs.

d. The State Education Department should consider seriously the advisability of transferring the control of the industrial teacher training program to the Teacher Education and Certification Division. The present situation in this field, under the control of the Vocational and Extension Education Division, represents an exception to the policy of centering responsibility for teacher training in the teacher training division of the Department. This exception undoubtedly accounts in part for the cleavages between industrial and general high schools.

In the early days of the industrial education program it was necessary for vocational industrial educators to assume the task of training teachers, but the program today is not in its infancy, nor is it an uncharted field. To put it on the same basis as other forms of teacher training by placing it under the control of the Teacher Education and Certification Division of the State Education Department might prove advisable. Its importance would warrant equal status with other types of teacher training. There is no reason to suppose that the program would suffer, even though it has its own peculiar problems, since the advice of the Vocational and Extension Education Division could still be secured. The Division does this at the present time in the cases of industrial arts, home

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economics, vocational agriculture, and vocational technical. Teacher training in these fields has not suffered because they are not under the supervision of the Vocation and Extension Education Division.

6. The two important recommendations concerning certification relate to business education and industrial education teachers.

*a.* The state certification requirements for business teachers should require the completion of at least a four-year curriculum leading to a Baccalaureate degree, or its equivalent, from an accredited school of business, or an accredited department of economics in an institution having membership in the American Association of Collegiate Schools of Business or in any public institution not a member of this association which maintains standards equivalent to those required for membership in the Association.

Recently collegiate schools of business have developed their programs to such an extent that adequate training facilities are available. However, there are so many kinds of schools of business in which teachers may obtain training that standards are necessary in order to protect the quality of training which prospective teachers receive. Hence, it is necessary to use, in measuring the competence of such schools, a standardizing agency. At present the American Association of Collegiate Schools of Business is the only one available.

*b.* The requirement of one year of high school as the formal educational requirement for full-time trade and industrial teachers, in use today, was instituted in the early development of vocational work, when it would have been impossible to obtain adequate teachers under more stringent educational standards. This program was established twenty years ago, but many teaching applicants today have more educational experience than one year and during recent years the educational preparation of students in these courses has gradually increased. In 1934-35 only 18 per cent of the

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students in industrial teacher training classes in New York City had had only one year of high school. With higher salary scales for teachers and with tenure, it should not be difficult to secure persons with more formal training. The nature of the program proposed in this report requires additional preparation.

Within five years the requirement for full-time vocational teachers of industrial shop subjects should be changed to require at least high school graduation, or its equivalent, in addition to four years of employment on a journeyman's status, and thirty-two semester hours of approved professional training.

7. All teachers and administrators of vocational courses should be required to do professional improvement work.

The work need not be taken in formal classes. It may be either course work, travel, employment, research, or any other type of activity appropriate to the individual's capacity to teach his subject effectively.

In connection with such in-service training for teachers and administrators, the State Education Department should extend its services to all groups, localities, and institutions in the State interested in this work. The excellent work of the Bureau of Home Economics Education along this line is to be commended.

8. One of the major determining factors of the future success or failure of the program of training for vocational adjustment is whether New York State can develop enough capable leaders for its local programs. The enrollment of vocational schools has grown rapidly since 1929. Local boards of education are searching more and more for persons qualified to act as leaders. Men and women of the type needed in this field are few, yet their opportunities for advancement will increase in the future. For these reasons the State Education Department should be actively interested in the development of a leadership program.

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It should cooperate with both public and private colleges and universities in the State in order that appropriate educational programs will be inaugurated.

The State Education Department should cooperate with all graduate departments of education in the colleges and universities of the State, not only with state supported graduate schools, with the idea of developing graduate work in this field. The State should encourage the expansion of such a program by establishing fellowships and scholarships, which should be available to promising teachers who need financial assistance during the period they are qualifying for administrative positions. These fellowships and scholarships should be awarded only to those who take their training in approved graduate schools.

### COOPERATION WITH OTHER AGENCIES

The State Education Department should maintain cooperative relations with other agencies that can assist in the realization of the objectives of the program. Such agencies as the State Department of Labor, the Department of Agriculture and Markets, and the Department of Social Welfare can render invaluable assistance to the Education Department in accumulating necessary data and, in some instances, in rendering effective services. For example, the Department might develop in cooperation with the State Junior Employment Service a plan for placement and follow-up which might be used by some communities. The Division of Unemployment Insurance is accumulating very valuable data on employment trends and job opportunities. This material will undoubtedly prove helpful to the State Education Department in the future.

The State Education Department should actively cooperate with the State Department of Labor in maintaining appropriate labor standards for apprenticeship programs. As a matter of fact, the Labor Department should be consulted

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concerning the effect of school programs on labor standards in general.

### COMPULSORY PART-TIME CONTINUATION LAW

The subject of the compulsory school attendance age raises questions which go beyond the scope of this report, but certain aspects of the problem which have been encountered in this investigation might be mentioned. The present continuation school law was conceived when boys and girls left school at fourteen and fifteen years of age, not sixteen and seventeen years of age. A different situation needs to be faced today.

The Inquiry staff making this report sees no reason why, at the present time at least, the full-time compulsory school attendance age should be changed. However, certain changes in the law concerning school attendance for those who are sixteen years of age and over seem advisable.

The present compulsory part-time continuation law should be repealed in favor of a law that will provide a wider range of educational opportunities for those who have reached sixteen years of age, and that will serve more adequately the needs of such young persons. The new law should be in line with the following proposal. Sixteen- and seventeen-year-old minors who have not completed a secondary school education through grade 12, who are not employed, or are employed only part-time, and who are not attending a full-time day educational institution, should be required to pursue such educational experience as the local school district may determine. As long as the pupil is fully employed he should be excused from such a requirement, but he should not be deprived of any facility which the school has to offer if he should desire to use them. Furthermore, he should be urged to use the facilities of the school. This recommendation does not imply that the pupil concerned should necessarily return to formal school, but that he should be required to pursue such educational experience as the local community may determine.

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The locality is to be the judge of what is required. Each child should pursue the educational experience most appropriate to him. The experience, for example, might be in the Civilian Conservation Corps. Brush-up, retraining, or advanced courses in work formerly pursued in the school might be open to these children.

This report has stressed the responsibility of the school for the initial adjustment of pupils, which implies placement of youths in jobs. But at times there are no jobs, or only a few, or there are youths who cannot, for one reason or another, find jobs or become adjusted to work.

With an invariable leaving age there cannot be a precise or even an approximate equalization between those who leave school and the number of opportunities for work. However, this situation might partially be overcome by establishing a variable leaving age. The leaving age would depend upon the ability of youth to find jobs. Such an arrangement would help to rectify the present tragic situation, in which hundreds of children in the State are neither employed nor going to school; they are only creating a future social problem.

To contend that the pupil will receive little benefit from being forced to pursue this educational experience is to admit that the program cannot be made attractive and stimulating. The situation should constitute a challenge to school administrators.

### REGENTS' EXAMINATIONS

If the school assumes its obligation to certify that the pupil is able to adjust himself initially to his work, there seem to be little need for Regents' Examinations in vocational courses. If it is carefully administered, the certification by the school should in itself constitute sufficient prestige. In addition, the further development of Regents' Examinations in vocational fields would introduce an undesirable element of rigidity in the course and subject contents. Flexibility is essential if a desirable

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program is to be developed. Furthermore, it would be extremely difficult to develop adequate Regents' Examinations in courses in which the content varies from year to year.

If the schools are asked to assume the responsibility of certifying the individual's competency for initial adjustment, it is essential that they be given freedom to develop courses in whatever way they desire. This is another reason why the State should no longer prescribe courses of study. Furthermore, the objective of the program is the successful vocational adjustment of the pupil, not to pass or fail him on pencil-and-paper examinations. An important part of his education is conducted in the shops and laboratories. It would be difficult to examine such work with the tests available at the present time. The preparation of the examination is not so difficult as setting up the proper facilities for giving the examination, for it would be imperative that these examinations be given at the same time throughout the State in order to dispel any suggestion of coaching.

The vocational staff of the Regents' Inquiry believes that it is possible to develop trade tests which will test vocational knowledge and skill as well as desirable attitudes and appreciation. Progress has been made in various sections of the country in testing applicants who wish to become teachers of vocational subjects. Some progress has been made in measuring achievement in vocational classes. However, most of these examinations have been paper tests, not tests of practical ability. Sampling the practical experiences of a student would require at least a day, and perhaps should require more. An additional half day is usually considered necessary for a written examination. An insurmountable obstacle, however, is presented, as indicated above, when a large number of students need to be tested at one time and there is not sufficient equipment available for the examination.

If the State Education Department insists upon requiring Regents' Examinations in vocational industrial work, as they

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have in technical education, one can expect to find as time goes on that the practical part of the examinations will be minimized more and more, and the technological part of the examination will increase in importance. If this should take place, the objectives of the various courses would become distorted, and the emphasis would be placed mainly on the development of related and technological information which can be more readily measured.

In home economics as in business education, impending Regents' Examinations always influence class activities. Seventy-five out of a total of one hundred twenty-five business teachers stated that "maintaining standards" was the major effect of Regents' Examinations on the teaching of business subjects.

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